AUGMENTING SECURITY ON DEPARTMENT OF DEFENSE INSTALLATIONS
TO DEFEAT THE ACTIVE SHOOTER THREAT

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LESLIE M. STANSBERRY, MAJOR, U.S. MARINE CORPS
BSBA, University of Missouri-Columbia, Columbia, Missouri, 2001

Fort Leavenworth, Kansas
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Name of Candidate: Major Leslie M. Stansberry

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Approved by:

_____, Thesis Committee Chair
LtCol Mitchell L. Hoines, MMAS

_____, Member
Timothy R. Hentschel, Ph.D.

_____, Member
Patrick C. Beatty, M.A.

Accepted this 10th day of June 2016 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

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ABSTRACT

AUGMENTING SECURITY ON DEPARTMENT OF DEFENSE INSTALLATIONS TO DEFEAT THE ACTIVE SHOOTER THREAT, by Maj Leslie M. Stansberry, 123 pages.

Active shooter attacks appear to occur more in the United States than other countries and some data shows that their rate of occurrence has increased in the past several years. In response, institutions such as the Department of Defense (DoD), other federal agencies, police, and education systems have increased security and adapted response procedures. Despite ongoing efforts, active shooter attacks occurred in Fort Hood, Texas in 2009, the Washington Navy Yard in 2013, and Chattanooga, Tennessee in 2015. Regardless of the level of security, it appears that the proliferation of firearms in combination with radicalization through the Internet have facilitated more individuals to perpetrate active shooter attacks. These attacks also appear to have similar characteristics whether conducted on DoD installations or in other areas. This thesis studies a variety of available military documents, active shooter case studies, and other active shooter defeat strategies to determine if the military could benefit from increased numbers of armed personnel to augment military and civilian law enforcement personnel. The benefit to the DoD includes increased probability of prevention and deterrence of active shooter events, and a more efficient mitigation and defeat mechanism to reduce casualty rates and terminate the event.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

ACRONYMS

ASE	Active Shooter Event
AT	Antiterrorism
CbT	Combating Terrorism
CONOP	Concept of Operation
CT	Counterterrorism
DHS	Department of Homeland Security
DOD	Department of Defense
DOTMLPF-P	Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities and Policy
EOC	Emergency Operations Center
FBI	Federal Bureau of Investigation
FP	Force Protection
HVE	Homegrown Violent Extremist
ISIS	Islamic State of Iraq and al-Sham
LE	Law Enforcement
MP	Military Police
NCOs	Non-commissioned Officers
NYPD	New York Police Department
PMESII	Political, Military, Economic, Social, Infrastructure, and Information
UM	Unit Marshalls
UMP	Unit Marshall Program
WNY	Washington Navy Yard

ILLUSTRATIONS

TABLES

CHAPTER 1

INTRODUCTION

The tragic shooting on July 16 in Chattanooga, Tennessee, illustrates the continuing threat to DoD personnel in the U.S. homeland posed by Homegrown Violent Extremists. This incident and the ongoing threat underscore the need for DoD to review its force protection and security policies, programs, and procedures, particularly for off-installation DoD facilities.
— Secretary of Defense Ash Carter, Force Protection Recommendations following Chattanooga Shooting

Is there a threat to the U.S. and the homeland? Recent attacks on American soil to include schools in Colorado, Oregon, Virginia, and Connecticut and those against military facilities in Tennessee, Virginia, and Texas clearly demonstrate the nation's vulnerability to acts of terror. Whether insider threats, lone wolves, violent extremists, or terrorists, with motives ranging from money to religious ideology, the operational environment both abroad and within the nation's borders has changed in the past few decades and continues to evolve rapidly. "The experiences of the past several years have deepened the realization that state and non-state adversaries alike may seek to attack military and civilian targets within the United States. Protecting the nation and its people from such threats requires close synchronization between civilian and military efforts."[1]

Background

Established in November of 2002 in light of the terrorist attacks, The Department of Homeland Security (DHS) signified a changed world and the nation's new way of life. The *National Strategy for Homeland Security* identified the need to protect civil liberties

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[1] Secretary of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, February 2010), 41.

and individual freedoms, but recognized that liberty cannot exist in the absence of governmental restraint. The document further identified that existing laws for protecting the homeland appeared inadequate in light of the 2001 terrorist attacks and that revisions to existing laws or the creation of new laws were likely required to ensure better protection of the country. [2] Our DoD assets once again appeared vulnerable following the Fort Hood, Texas massacre in 2009, and led the Deputy Secretary of Defense to author DoD Directive 5210.56, *Carrying of Firearms and the Use of Force by DoD Personnel Engaged in Security, Law and Order, or Counterintelligence Activities.*

This approach was designed to further enhance the DoD's capability to mitigate attacks on facilities and personnel; and outlines policy for the augmentation of security, the carry of weapons, and use of force on post. The policy directs that additional arming should be limited and controlled to qualified personnel where assets or lives could be jeopardized without arming those individuals. DoD components retain the discretion to keep qualified or available staff personnel armed to perform security duties based on the mission and the threat.[3] In addition, the policy directs issuance of firearms on a case-by-case basis for personal protection and only for the length of a specific assignment or threat.[4] Secretary of Defense Ash Carter further emphasized this directive in his memorandum dated 29 July 2015, that the policy allows for commanders and civilian

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[2] Office of Homeland Security, *National Strategy for the United States* (Washington, DC: The White House, July 2002), 48.

[3] Deputy Secretary of Defense, Department of Defense (DoD) Directive 5210.56, *Carrying of Firearms and the Use of Force by DoD Personnel Engaged in Security, Law and Order, or Counterintelligence Activities* (Washington, DC: Government Printing Office, April 2011), 2.

[4] Ibid., 6.

directors to arm qualified DoD personnel, not regularly involved in Law Enforcement (LE) duties, based on the threat and immediate protection of assets and lives.[5] However, most DoD components will likely weigh any risk of arming additional personnel against the potential effectiveness of pre-established security measure escalation that involves force protection and antiterrorism measures.

The DoD uses a combating terrorism (CbT) methodology for implementing antiterrorism (AT) and counterterrorism (CT) measures, and supporting functions such as intelligence collection, information sharing, and incident management.[6] The DoD also implements a force protection (FP) construct that contains certain elements of the AT program. FP is defined as preventive measures to mitigate hostile actions against DoD assets, but does not include actions to defeat the enemy or protect against accidents, weather, or disease.[7] CbT includes the defensive and offensive components of AT and CT. AT is the application of defensive measures used to reduce the vulnerability to terrorism and facilitate rapid containment of the situation. CT is direct action against terrorist networks, or indirect measures to degrade the safe haven of terrorist networks.[8] This paper will focus more on AT measures since CT implies more of a deliberate, direct-action role against terrorism and cells.

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[5] Ashton B. Carter, Memorandum, *Force Protection Recommendations Following Chattanooga Shooting* (Washington, DC: Secretary of Defense, 29 July 2015), 1.

[6] Joint Chiefs of Staff, Joint Publication (JP) 3-07.2, *Anti-terrorism* (Washington, DC: Government Printing Office, November 2010), 29.

[7] Ibid., 31.

[8] Ibid., 29.

AT programs integrate various FP-related programs such as physical security and surveillance detection that help prevent violent acts like active shooter.[9] Physical security is that part of security concerned with physical measures designed to safeguard personnel and prevent unauthorized access.[10] From this, the DoD established FP conditions that support AT programs under the broader FP and CbT constructs to support installation commanders with terrorism prevention and mitigation procedures. Augmented security by its verbiage and nature, defensive actions to reduce vulnerability and contain the situation rapidly, falls under the FP and AT construct.

DoD further describes the mindset of subordinate services concerning AT campaigns. The following is a list of required standards from the joint AT publication: The minimum required elements of a DoD Component AT program shall be risk management, planning, training and exercises; resource application; and comprehensive program review. The development and maintenance of the AT program elements are enduring and continuously refined.[11] Furthermore, it seems these minimum standards for the AT program should be weighed against augmenting security personnel to deter or mitigate active shooter threats.

Force protection conditions are approved standards by the Chairman of the Joint Chiefs of Staff for identification and responses to terrorist threats against U.S. personnel

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[9] Joint Chiefs of Staff, JP 3-07.2, 31.

[10] Joint Chiefs of Staff, Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, 8 November 2010, as amended through 15 February 2016), 190.

[11] Principal Deputy Undersecretary of Defense for Policy, Department of Defense (DoD) Instruction 2000.16, *DoD Antiterrorism (AT) Standards* (Washington, DC: Department of Defense, December 2016), 12.

and facilities.[12] By design, DoD leaders should enjoy enhanced decision-making with regards to assignment of FP conditions through information and timely warnings gathered from well-planned, proactive, systematic, all-source intelligence.[13] FP conditions focus the security posture throughout the DoD, and most installations remain postured at force protection condition Bravo; meaning an increased or more predictable threat of possible terrorist activity exists. FP Bravo lies between the higher-level Charlie conditions where terrorist action is occurring or credible intelligence deems it likely, and FP Alpha, where the general nature of a terrorist threat is possible, but also unpredictable. The highest FP level is Delta where an attack has occurred or is imminent, but this condition is not sustainable for an extended period.[14] The recent attacks on military installations in the last six years will likely keep the DoD force postured at the increased and more sustainable FP Bravo for the foreseeable future.

These FP conditions drive increased use of other threat mitigation systems from the 2007 DoD 5200.08-R, *Physical Security Program,* that include: security forces and other personnel; military working dogs; physical barriers; facility hardening, and active delay or denial systems; secure locking systems, containers, and vaults; electronic security systems; assessment or surveillance systems like closed-circuit television; better lighting; credential technologies, access control devices, biometrics, materiel or asset

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[12] Joint Chiefs of Staff, JP 3-07.2, 168.

[13] Ibid., 18.

[14] Ibid.*,* 79.

tagging systems; and contraband detection equipment.[15] However, active shooters

exploited certain loopholes at Fort Hood, the Washington Navy Yard (WNY), and

Chattanooga, Tennessee despite the substantial and diverse threat mitigation buffet of

active and passive measures to prevent such attacks; and the services have responded in

varying degrees.

The attacks in Chattanooga prompted the Air Force to remind commanders they

can arm qualified airmen to carry weapons on base. Air Force Security Forces Integrated

Defense Action Officer Major Keith Quick, said that the Air Force is now formalizing its

authorizations by reinforcing how already established programs can be used more

effectively. Specifically, the Unit Marshal Program (UMP) allows unit commanders to

train airmen, or unit marshals (UM) under the supervision of security forces and openly

carry an M9 standard issue pistol. The role of these UMs would be self-protection and

protection of others in their workspace.[16]

The Marine Corps, on the other hand, has taken a more limited approach by

authorizing commanders exercising special and general courts-martial convening

authority to arm additional personnel for security purposes on both DoD-owned and

leased property. Marine commanders must take into account the threat probability by

conducting risk assessment. Commanders also must consider the timeliness and adequacy

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[15] Acting Undersecretary of Defense for Intelligence, Department of Defense (DoD) 5200.08-R, *Physical Security Program* (Washington, DC: Government Printing Office, April 2007 with change 1 May 2009), 13.

[16] Bryant Jordan, "AF Reminds Commanders: Authorized Conceal-Carry, Open-Carry OK on Base," Military.com, 21 January 2016, accessed 31 January 2016, http://www.military.com/daily-news/2016/01/21/af-reminds-commanders-authorized-conceal-carry-open-carry-base.html.

of protection already provided by DoD or federal/state agencies, and the adequacy of existing security measures. Commanders are required to report to the Marine Corps Operations Center noting the arming duration and termination criteria.[17] Therefore, the DoD may benefit from collective service dialogue of best practices concerning active shooter in light of their broad policy guidance in 2011.

Considering all of this, the DoD provides a solid foundation to build from and continues to implement procedures to mitigate active shooter threats. An independent review from the 2009 Fort Hood shooting noted that base personnel initiated appropriate and decisive action to secure the situation through training and preparation. The prompt and courageous acts of soldiers, to include one who died charging the perpetrator unarmed; first responders, local law enforcement personnel, DoD civilians, and health care providers prevented greater loss of life.[18] The shooting at Fort Hood occurred more than six years ago now and DoD has enhanced the protection of the force further since then. Contemporary training and standard operating procedures include the "Run, Hide, Fight" approach[19] and local law enforcement adapting their policies to secure the shooter

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[17] Commandant of the Marine Corps, MARADMIN 599/15, *Policy, Authorities, and Procedures Relative to Augmenting Security and Arming Personnel in the Performance of Security Duties*, U.S. Marine Corps, 25 November 2015, accessed 15 December 2015, http://www.marines.mil/News/Messages/MessagesDisplay/tabid/13286/Article/175420/policy-authorities-and-procedures-relative-to-augmenting-security-and-arming-pe.aspx.

[18] Department of Defense (DoD), "Protecting the Force: Lessons from Fort Hood" (Report of the DOD Independent Review, Department of Defense, Washington, DC, January 2010), 1.

[19] Department of Homeland Security (DHS), "Active Shooter: How to Respond," accessed 15 January 2016, https://www.dhs.gov/sites/default/files/publications/active-shooter-how-to-respond-508.pdf, 3-4.

first instead of treating it like a hostage situation.[20] Rehearsals throughout DoD have

provided better coordination with medical centers for mass casualties and better

coordination with local law enforcement through base emergency operations centers.

More importantly, though, the DoD will need to keep pace with policies, standard

procedures, and guidance that allow DoD components and commanders to deter, prevent,

mitigate, and quickly contain terrorist attacks as they continue to evolve.

<u>Problem Statement</u>

Military Police (MP) and civilian LE officials are currently the only personnel

authorized to carry loaded, ready firearms on a continual basis on DoD installations.

However, as stated previously, the DoD provides the latitude for each of the services to

arm additional forces based on the threat and mission. In response to this guidance,

research suggests that not one of the services has initiated execution of a long-term

additional arming program, although the Air Force has developed the UMP Concept of

Operation (CONOP). The current operating environment abroad and the resulting

security environment within the homeland continue to warrant discussion of policy and

methods to mitigate the growing threat of active shooter; with its difficult detection and

spontaneous occurrence. Moreover, the active shooter profile is not just limited to a

violent extremist threat, but in some cases comes from a trusted insider threat that may

attack for reasons other than religion or ideology. Tragic domestic active shooter attacks

on DoD personnel, including those at the WNY, Chattanooga, and Fort Hood; and at

Institutions of Higher Education throughout the United States provide substantial

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[20] J. Pete Blair et al., *Active Shooter Events and Response* (Boca Raton, FL: CRC Press, Taylor and Francis Group, 2013), 13.

evidence of this troubling trend. The growing potential and diversity of attackers, coupled with the proliferation of semi-automatic firearms and the time gap that exists between active shooter engagement and LE response, may require a more aggressive DoD-wide policy on armed and augmented security personnel.

The challenge for the DoD is to prepare more effectively for a constantly changing security environment. The DoD's security posture may be inadequate to deter, prevent, mitigate, and defeat active shooter threats. Active Shooter Events (ASEs) entail characteristics at varying degrees that are ripe for high casualties to include shooter initiative, human judgment in application of ASE defeat, time gap of first responders, indiscriminate killing, termination through armed response, soft targeting, and complexity of the situation. The force should continue to develop mechanisms that anticipate these current threats and how they will manifest themselves in the future.

Unfortunately, it often takes a major tragedy to occur before major changes take place[21] just as Chattanooga prompted another look at DoD policy concerning armed security. DoD's physical security program is intended to provide security guidance and general procedures that are realistic, harmonized with other active or passive security measures, and provide the necessary flexibility for commanders to protect personnel, installations, projects, operations, and related resources against capable threats from terrorists, criminal activity, and other subversive or illegal activity.[22] Therefore, the intent of this paper is to determine if DoD could enhance individual self-defense and collective

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[21] DoD, *Protecting the Force*, 7.

[22] Acting Undersecretary of Defense for Intelligence, DoD 5200.08-R, 11.

force preservation by considering a more robust DoD-wide posture by augmenting security personnel working on DoD installations.

Research Questions

Primary Question: Should the DoD direct the services to initiate security augmentation programs consisting of additional armed personnel to increase deterrence of potential active shooters and decrease casualties during active shooter duration?

Secondary Research Questions:

1. Given the nature of the current threat, how can the DoD balance the risk versus gain of arming additional personnel DoD-wide?

2. What are the general characteristics of ASEs and what are the distinctions of DoD focused attacks, if any?

3. Would DoD-wide security augmentation complement current policy and doctrine, or is sweeping change required?

Assumptions

This study is a highly contentious topic throughout the DoD and with Congress. For the purpose of this research, it was necessary to draw a variety of assumptions to help focus the research and subsequent framework of this study. First, the current threat environment will likely present the nation and DoD installations with an increase in active shooter plots. Second, DoD personnel work closely with host nation LE, and U.S. LE professionals during combat operations and security exercises to provide an increased security posture; the same can be done here at home. Third, the standard definition and description of active shooters, as described in this paper, will remain relevant and

unchanged for the foreseeable future. Finally, that no DoD component or installation has implemented the full-time arming of DoD personnel other than LE.

Definitions

Active Shooter: DHS defines the active shooter as "an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearm[s] and there is no pattern or method to their selection of victims."[23] For the purpose of this paper, they may include but are not limited to, contemporary threats such as insiders, lone wolves, or homegrown violent extremists.

Armed: Equipped with a firearm that has a live round of ammunition in a magazine inserted into the firearm, chamber, or cylinder.[24]

Augmented Security: For the purpose of this study only. Arming of DoD personnel, outside of military police and DoD-contracted civilian LE, to provide an additional layer of security in the workplace. Augmented security does not execute LE functions.

DoD Installation: A base, camp, post, station, yard, center, or other activity under the jurisdiction of the secretary of a military department or, in the case of an activity in a foreign country, under the operational control of the secretary of a military department or the Secretary of Defense.[25]

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[23] DHS, "Active Shooter: How to Respond," 2.

[24] Deputy Secretary of Defense, DoD Directive 5210.56, 13.

[25] Acting Undersecretary of Defense for Policy, Department of Defense (DoD) Instruction 2000.12, *Antiterrorism Program* (Washington, DC: Department of Defense, March 2012 incorporating change 1, September 2013), 30.

Homegrown Violent Extremist (HVE): Homegrown violent extremists are those who encourage, endorse, condone, justify, or support the commission of a violent criminal act to achieve political, ideological, religious, social, or economic goals by a citizen or long-term resident of a Western country who has rejected Western cultural values, beliefs, and norms.[26]

Insider Threat: The threat an insider will use her or his authorized access, wittingly or unwittingly, to do harm to the security of the United States. This can include damage to the United States through espionage, terrorism, unauthorized disclosure of national security information, or through the loss or degradation of departmental resources or capabilities.[27]

Lone Terrorist or Wolf: Typically, the lone terrorist is an individual that shares an ideological and sympathetic identification with an extremist organization and its goals, but the lone terrorist does not communicate with any group as he or she fashions political aims and commits acts of terrorism, although there may have been direct contact in the past.[28]

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[26] International Association of Chiefs of Police Committee on Terrorism, Countering Violent Extremism (CVE) Working Group, *A Common Lexicon* (Alexandria, VA: International Association of Chiefs of Police, 2012), 5, accessed 25 April 2016, http://www.theiacp.org/portals/0/pdfs/IACP-COT_CommonLexicon_Eng_FINAL Aug12.pdf.

[27] Deputy Secretary of Defense, Department of Defense Directive, 5205.16, *The DoD Insider Threat Program* (Washington, DC: Government Printing Office, September 2014), 15.

[28] Joint Chiefs of Staff, JP 3-07.2, 13.

In support of this thesis, there is limited ability to gain access to a wide variety of investigators, active shooters, and victims for personal interviews. The limited number of active shooter events on DoD installations makes comprehensive analysis difficult to support this thesis. However, to fill this gap, this paper considered generalizations from collective active shooter case studies. Best practices for armed personnel and security policies of various other organizations may reside on classified networks that will limit access. In addition, although the Freedom of Information Act allows for the full or partial release of information held by the U.S. government, sometimes it is years before the release of investigations into active shooter events, and lead agencies such as the Federal Bureau of Investigation (FBI) are not required to release the information until the investigation is complete.[29] Therefore, media sources were necessary to capture specific circumstances surrounding all of the military case studies analyzed in this paper. Finally, courts typically require years to resolve and adjudicate foiled active shooter plots, which limits research.

Scope

Research to support this study focused on DoD as a whole with limited input from some services regarding active shooter mitigation methods, i.e. the Air Force UMP and the Army protection principles and "every soldier as sensor" programs. Although the history of armed carry by military personnel within the United States and its impact on society and laws could provide valuable insight, comprehensive analysis is not necessary

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[29] Federal Bureau of Investigation, "Freedom of Information Act/Privacy Act," accessed 10 April 2016, https://www.fbi.gov/foia/.

as this paper focuses on DoD installations. Along these same lines, a perceived issue impacting the arming of additional troops, outside LE, is the Posse Comitatus Act. The relevant aspect of this act is summarized by law as: "Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both."[30] Posse Comitatus prohibits military personnel from enforcing the law within the United States except as expressly authorized by the Constitution or an Act of Congress.[31] However, the focus of this paper is specific to self-defense on federal property, and not arming of extra personnel for LE duties or off-base carry of firearms.

<div align="center">Delimitations</div>

This study will not address in detail other DoD security measures to be taken other than the use of additional armed force. In addition, even though most recruiting stations are leased property and qualify as DoD installations, they are located and more closely intertwined with civilian populace. Therefore, the unique security circumstances of recruiting centers and the potential implications of the Posse Comitatus Act require additional and distinct research.

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[30] Legal Information Institute, "§ 1385. Use of Army and Air Force as Posse Comitatus," Cornell University Law School, accessed 15 October 2015, https://www.law.cornell.edu/uscode/text/18/1385.

[31] Office of Homeland Security, *National Strategy for Homeland Security*, 48.

Significance

This research is significant as it examines current homeland DoD force protection doctrine and may offer context in developing solutions to defeat the evolving and time-sensitive active shooter threat. Active groups cumulatively caused the death or injury of several hundred people during active shooter events in Mumbai, India; Nairobi, Kenya; and Paris, France. These events should spur debate about the ability to defeat a threat of this nature in the United States and on DoD installations. The DoD may be inadvertently causing its personnel to be more vulnerable on base or less able to defend against active shooter threats than they are off-post. Research, context, and conclusions from this study may prove that seemingly riskier, yet more secure; measures exist to further empower installation commanders with safeguarding DoD men and women from active shooter attacks.

Conclusion

DoD leadership and commanders at all levels have the responsibility and authority to enforce appropriate security measures to ensure the protection of DoD property and personnel assigned, attached, or subject to their control.[32] The proliferation of terrorism and their increasing arsenal of attack methods warrant further debate of methods to assist these commanders in preventing terrorist attacks and reducing losses in the terrorist attacks that do occur. The increased presence of ASEs and their unique characteristics provide the DoD with a set of new challenges. In Israel, the discussion of

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[32] Undersecretary of Defense for Intelligence, Department of Defense Instruction 5200.08, *Security of DoD Installations and Resources and the DoD Physical Security Review Board (PSRB)* (Washington, DC: Department of Defense, December 2005, incorporating change 3, November 2015), 3.

15

gun ownership is not about one of rights but a tragic responsibility.[33] Directing military leaders to develop and implement security augmentation programs across the force may be necessary to reduce the lucrative appeal of military targets for potential active shooters to exploit and save the lives of DoD personnel.

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[33] Daniel Gordis, "What Americans can learn from Israel's Gun Culture," *Bloomberg View,* 29 June 2015, accessed 28 November 2015, http://www.bloomberg view.com/articles/2015-06-29/what-americans-could-learn-from-israel-s-gun-culture.

CHAPTER 2

LITERATURE REVIEW

> I would say that even if we were able to respond (in time to confront the attacker) 20% of the time, this training would be worth it. It's really hard to say how many lives can be saved. But there is no question in my mind that when an officer engages, it makes a difference. No question.
> — FBI Deputy Director Mark Giuliano, quoted in Kevin Johnson
> "FBI trains 30,000 to confront active shooters"

Introduction

Although ASEs and mass shootings have taken place throughout U.S. history, extensive literature is relatively limited to recent history. ASEs were more sporadic prior to the 21st century. The shooting at Columbine High School changed the way police approached ASEs by not waiting for SWAT. The Columbine shooters demonstrated continuous indiscriminate killing, vice hostage standoff, necessitating immediate action by first responders. This new approach encouraged greater emphasis on tactical training for local units and LE; and studying, compiling, and analyzing ASEs to better prepare for future attacks.[34]

This chapter will focus on this recent literature to address the current active shooter threat, its spontaneous nature, and its ability to rapidly evolve. Part of this review will focus on the rise of Homegrown Violent Extremists (HVEs) and the danger of insider threats to the military. An analysis of specific military active shooter case studies in relation to analysis of collective active shooter case studies offered context for trends

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[34] Blair et al., 13.

to emerge. Finally, current DoD doctrine, policy, and best practices were researched, to include external DoD information that may prove useful to this study.

A wealth of information concerning the threat of terrorism and the potential for ASEs rests in classified documents or "For Official Use Only" documents that would change the classification of this study. However, there exists a plethora of other unclassified documents that present enough material to develop analytical reasoning and draw conclusions in support of this study. The most significant difference is that For Official Use Only literature may focus on the most current information and detailed specifics of the case. Unclassified literature may focus more on generalities but is still relevant and substantial for this study. The unclassified inquiry provided information from a broad range of resources to include in priority order; congressional testimony, federal and state investigations and case studies, DoD and subordinate component policy, and other open-source information such as media outlets.

<center>Threat Documents</center>

The majority staff of the House Committee on Homeland Security produces a monthly document called the "Terrorist Threat Snapshot." This document, based on open source literature, provided information of terrorist-linked attacks in time chunks to include a previous year assessment, last five-year assessments, and assessments since 9/11. It included information on recent attacks, foiled attacks, the international landscape and global jihad leaders such as Islamic State of Iraq and the Levant (ISIS) and Al Qaeda; and most important to this study, statistics concerning the rise of HVE. *ISIS in America: From Retweets to Raqqa*, was a comprehensive study of ISIS recruits in the United States conducted by the Program on Extremism at George Washington University. The Program

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on Extremism provided analysis on issues related to extremism to provide thoughtful inquiry and research. The intent is to make extremism a distinct field of study and support the decision-making process of policy makers and civic leaders.[35]

Other sources of threat information included the, *Worldwide Threat Assessment of the U.S. Intelligence Community* by the Senate Select Committee on Intelligence that provides information on regional threats, global jihad, and the evolving homeland threat landscape. More at the tactical level, in their Spring 2013 issue of *Inspire,* Al Qaeda provided a lone Mujahid pocket guide for conducting various lone wolf attacks with specific discussion of an armed attack being less detectable, easier to plan, and quicker; leading to more success.

<div align="center">Military Case Studies</div>

Media and police reports offer a considerable amount of literature on active shooter incidents; however, military and FBI investigations provide the most succinct, comprehensive, and unbiased analysis of the events. The FBI and local police conducted investigations, and the DoD and Congress conducted separate investigations and independent reviews into the shootings by Major Hasan Nidal at Fort Hood in 2009 and Aaron Alexis at the WNY in 2013. However, the events of the Chattanooga shooting in Tennessee by Mahammad Abdulazeez are still pending investigation and release authority. Together, these events provide context and generalizations to weigh and analyze to determine the severity of additional arming of forces. Unfortunately, a

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[35] Lorenzo Vidino and Seamus Hughes, "ISIS in America: From Retweets to Raqqa" (Program on Extremism, George Washington University, Washington, DC, December 2015), 7.

Freedom of Information Act request concerning the Fort Hood joint investigation between the Army Criminal Investigative Department and FBI ended with negative response due to Nidal Hasan still sitting on death row.

One of the most comprehensive investigations of the 2009 Fort Hood shooting was the DoD independent review called *Protecting the Force: Lessons from Fort Hood.* Specifically useful for this study was the context of the environment at Fort Hood and throughout the DoD as a whole. Generally, the FP measures in place at the time were lacking, and failed to address the threat. However, this report and other independent reviews did not provide specific details of the event for effective analysis. For this information, open source witness interviews from higher-ranking officials were gathered. An independent review by Congress called *A Ticking Time Bomb: Counterterrorism Lessons From the U.S. Government's Failure to Prevent the Fort Hood Attack,* provided information on Major Hasan's progress through the military and offers a great vignette on the HVE and insider threat. The *Final Report of the William H. Webster Commission on the Federal Bureau of Investigation, Counterterrorism Intelligence, and the Events at Fort Hood, Texas, on November 5, 2009*, provided valuable insight into the FBI's handling of Major Hasan before the shooting occurred, that demonstrates the human error posing risk to threat mitigation. Other service investigations were researched; however, each service report provided a status of their own situation against the recommendations of the DoD independent review and their plan for gaining compliance that is outside the scope of this study.

Many of the same agencies involved in the Fort Hood shooting also investigated the WNY active shooter event in 2013. The DoD produced *Security from Within:*

Independent Review of the Washington Navy Yard Shooting, and provided context into the force protection measures implemented at the time and recommendations for future action. The DoD's independent review, *Security from Within,* echoed many of the concerns from a force protection standpoint as the DoD's internal report. Fortunately, the Metropolitan Police Department produced their own internal review of the WNY, *After Action Report Washington Navy Yard September 16, 2013.* The Metropolitan Police Department's report provided better fidelity of the shooting in terms of timelines and personnel involved and significantly enhanced the military case study review.

The events of Chattanooga are still under investigation by the local FBI office. The FBI media program releases information to local media outlets as facts in the investigation surface. Furthermore, the Chattanooga case study used multiple correlating media sources because FBI policy restricts the release of certain information to the public until the investigation is complete. A primary source was the *TimesFreePress* article that detailed how the FBI determined the events of the shooting unfolding. The Chattanooga case study is important to this paper as the most recent ASE involving the military outside a major installation; however, this effort required more local media sources as opposed to Fort Hood or the WNY.

<div align="center">Collective Case Studies</div>

In March 2013, the Advanced Law Enforcement Rapid Response Training group through Texas State University produced their study, *United States Active Shooter Events from 2000 to 2010: Training and Equipment Implications.* The study used Lexis-Nexis to

search news stories from 2000 to 2010 for ASEs in the United States.[36] Data presented in

the study included information from investigating agencies, supplemental homicide

reports produced by the FBI, and news stories; with priority of information going to

investigation reports, followed by the supplemental homicide reports, and finally news

reports. When forced to use only news reports in 19 out of 84 cases, they used the most

recent story since reporters had more time to gather relevant and accurate information.[37]

This study is relevant to the central problem of this paper by providing data on shooter

location selection, shooter variables, method of event termination, and casualties; as well

as active shooter training and mitigation techniques.

The New York City Police Department (NYPD) released its 2012 version of

Active Shooter: Recommendations and Analysis for Risk Mitigation in the wake of the

shootings in Newtown, Connecticut. The study is a compilation of ASEs from 1966

through 2012. The NYPD has limited this definition to include only those cases that spill

beyond an intended victim to others.[38] In addition, this study did not include gang-related

activity, domestic settings, robberies, events without firearms, hostage taking, and drive-

by shootings.[39] The data does not include attacks outside of the United States, attacks that

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[36] J. Pete Blair, Ph.D. and M. Hunter Martaindale, "Active Shooter Events from 2000 to 2010: Training and Equipment Implications" (Texas State University, San Marcos, TX, March 2013), 3.

[37] Ibid., 4.

[38] New York City Police Department (NYPD), *Active Shooter: Recommendations and Analysis for Risk Mitigation* (New York: New York City Police Department, 2012), 1.

[39] Ibid., 10.

did not result in casualties, or foiled attacks.[40] Where there were discrepancies in media

accounts and reports, the NYPD report went with the most recent report and the

government document over media reports.[41] This study provided data gathering and

analysis that concerns the central problem of this paper through active shooter timing,

location, weapons used, casualties produced, police response times, shooter variables,

and event resolution.

In 2013, President Barack Obama signed into law investigative assistance that

granted the attorney general the authority to assist in the investigation of shootings in

public or mass killings at the request of local or state LE. In 2014, the FBI provided its

collective case study, *A Study of Active Shooter Incidents in the United States Between*

2000 and 2013; with the goal to provide federal, state, and local LE with data to better

understand and combat ASEs.[42] Shootings that did not fit the definition of active shooter

such as gang activity, drug violence, or lack of violence were not included in this study.

To gather information for this study, researchers relied on police records, FBI records,

and open sources as necessary.[43] This study provided data gathering and analysis that

concerns the central problem of this paper by examining active shooter timing, location

selection, police response times, and termination criteria.

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[40] NYPD, *Active Shooter*, 4.

[41] Ibid., 10.

[42] J. Pete Blair and Katherine W. Schweit, "A Study of Active Shooter Incidents in the United States Between 2000 and 2013" (Texas State University and Federal Bureau of Investigation, U.S. Department of Justice, Washington, DC, 2014), 4.

[43] Ibid., 5.

Current Doctrine and Defeat Mechanisms

Based on the threat assessment and subsequent active shooter study, a comprehensive review of current DoD doctrine was conducted to analyze the military's approach towards the active shooter threat. In 2011, DoD published its Directive 5210.56, which provided details governing the arming of both LE and established rules governing the arming of qualified personnel outside of LE duties. Specific to this study it addresses the qualification needed to arm personnel, the proper use of deadly force, the proper storage and handling of firearms, and disqualifying criteria for arming such as the Lautenberg Amendment. The Lautenberg Amendment prohibits anyone with a misdemeanor conviction of domestic violence from possessing firearms or ammunition.

A review of literature concerning DoD policy and the security umbrella directed by DoD was conducted. DoD Instruction (DoDI) 2000.12, Subject: Antiterrorism Program, establishes policy, assigns responsibility, and prescribe procedures for the DoD AT program.[44] DoD Instruction 2000.12 establishes AT as an enabler, alongside physical security, emergency management, and LE, to the broader FP effort. The DoD AT program is an element of CbT and focuses on defensive measures used to reduce the vulnerability of individuals and property to terrorism.[45] This policy also defines the role and responsibility of the Defense Combating Terrorism Center, and directs the services to utilize DoD Instruction 2000.16, Subject: DoD Antiterrorism (AT) Standards, for planning and execution. DoD Instruction 2000.16 establishes the minimum required elements of a component AT program to include risk management, planning, training and

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[44] Acting Undersecretary of Defense for Policy, DoD Instruction 2000.12, 1.

[45] Ibid., 4.

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exercises resource application, and comprehensive program.[46] This document is also a great source for the detailed breakdown of each FP condition.

The previously mentioned policies are integrated with DoD Instruction 5200.08, Subject: Security of DoD Installations and Resources and the DoD Physical Security Review Board (PSRB), DoD 5200.08-R, and, DoD Instruction 6055.17, Subject: DoD Installation Emergency Management (IEM) Program. DoDI 5200.08, simply authorizes commanders to implement regulations to protect personnel and assets under their command, and sets the parameters for the Physical Security Review Board. DoD 5200.08-R directs the minimum standards for security of DoD personnel and resources that are realistic, integrated with other assets, and provide the necessary flexibility for commanders to protect personnel from terrorist activity.[47] DoD Instruction 6055.17 establishes policy and procedure for developing, implementing, and sustaining installation emergency management programs at DoD installations worldwide with the goal of preparing for emergencies, responding to save lives, and post-disaster recovery.[48]

The Air Force has taken the most aggressive approach of the services in identifying a solution that achieves the desired intent of DoD Directive, 5210.56, which authorizes commanders to augment LE and MP personnel on military installations. The Air Force determined that recent events like Chattanooga required a need to enhance

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[46] Principal Deputy Undersecretary of Defense for Policy, DoD Instruction 2000.16, 12.

[47] Undersecretary of Defense for Intelligence, DoD 5200.08-R, 11.

[48] Undersecretary of Defense for Personnel and Readiness, Department of Defense Instruction 6055.17, *DoD Installation Emergency Management (IEM) Program* (Washington, DC: Department of Defense, January 2009, incorporating change 1, November 2010), 1.

personal security and survivability between ASE initiation and the time of first responder's arrival. Headquarters Air Force Security Forces has developed a CONOP for the UMP as a means to bridge that gap. The UMP will consist of trained, armed personnel in identified work areas to prevent, deter, and increase survivability during ASEs.[49] Their concept of development for the UMP provides quality research and analysis critical to the study of this paper. The problem statement, potential solutions, equipping methods, and planning methodologies provide credible substance for analysis in chapter 4 and solutions in chapter 5.

The authors of *Active Shooter Events and Response* provide extremely useful information for the purpose of this study. The shooting at Columbine High School and the annual increase of ASEs since that time prompted more aggressive research in the active shooter arena. Most significant to this study were the insightful methodologies for the training of first responders and ASE planning considerations, which provided a baseline for recommendations in this paper. They also offer emerging tactics, techniques, and procedures; and great perspectives on the importance of potential actions taken during ASEs. Their study of ASEs led to a conclusion that training unit members to have the proper mindset with regards to any type of threat will significantly increase the odds of survivability. For example, when ASE type attacks kick off, training like you fight in

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[49] Branch Chief, Integrated Defense, Law and Order and MWD Division, Headquarters Air Force Security Forces, *Combating Active Shooter: Unit Marshal Program (UMP) CONOP* (San Antonio, TX: Headquarters, Air Force Security Forces, 4 November 2015), 2.

adverse conditions will significantly increase the likelihood of success during an actual event, like dialing 911 under duress or identifying and using various exit strategies.[50]

The authors of *Mitigating Active Shooter Impact; Analysis for Policy Options Based on Agent/Computer Based Modeling,* used "AnyLogic" computer based modeling to answer their hypothesis for ASEs in public education systems: "Does a relationship exist between the number and types barriers injected into an active shooter scenario and numbers of casualties incurred?"[51] The authors define Agent-based modeling as "a system is modeled as a collection of autonomous decision-making entities called agents. Agents may execute various behaviors appropriate for the system they represent."[52] The authors describe these agents or barriers as an employed security measure that helps reduce the time between attack initiation and attack culmination; thus reducing overall casualties. The model employed four scenarios each containing certain barriers: scenario one is basic with no additional security; scenario two involves 5 to 10 percent of teachers with concealed carry that remain static in their rooms; scenario three injects an armed resource officer that can maneuver through the school; and scenario four employs both a resource officer and concealed carry teachers.[53] This method allowed the user to create complex interactions between humans, in limited space, within a heterogeneous population, and the interaction of complex behavior during 50 different settings within

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[50] Blair et al., 179.

[51] Charles Anklam et al., "Mitigating Active Shooter Impact; Analysis for Policy Options Based on Agent/Computer Based Modeling," *Journal of Emergency Management* (March 2014): 3.

[52] Ibid., 8.

[53] Ibid., 2.

each of the four scenarios. It is important to note that the model fails to account for the

free will of human interaction.[54] The results of the AnyLogic Model provide additional

justification for characteristic development in chapter four and additional arming as a

potential tool or recommendation discussed in chapter 5.

Conclusion

This chapter focused on available literature on active shooters, individual military

case studies, collective case studies, and contemporary active shooter philosophy and

mitigation techniques. Specifically, it addressed the document review of unclassified

documents concerning the threat against the homeland, the motivation and general

characteristics of active shooters through military case studies, and analysis of various or

anticipated solutions to mitigate ASEs. The majority of literature indicated the need to

provide an additional layer of security via the security-in-depth approach on DoD

installations.

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[54] Ibid., 9-10.

CHAPTER 3

RESEARCH METHODOLOGY

> During the 2012 Colorado movie theater shooting incident, the Denver
> Post reported police arrived on the scene within 90 seconds. However, in less than
> two minutes the shooter completed his attack, killed 12, and wounded 58 people.
> — Jennifer Brown, "12 shot dead, 58 wounded in
> Aurora movie theater during Batman premier"

The research methodology used in this thesis will be qualitative inquiry consisting mostly of document review and comparative analysis of active shooter case studies on DoD installations where three ASEs occurred. Documents reviewed concerned the current threat driving potential ASEs. To provide general characteristics or variables of ASEs, research focused primarily on the collective studies from the FBI, NYPD, and Texas State University and the individual military active shooter events of Fort Hood, WNY, and Chattanooga. Lastly, document review of DoD and service doctrine and emerging best practices outside the DoD provided understanding of current and potential existing 'deter and defeat' mechanisms for use against active shooters.

Case study is qualitative research in which the investigator explores the real-life, contemporary bounded system or multiple systems over time, through detailed, in-depth data collection that involves multiple sources of information such as observations, interviews, audiovisual material, and documents and reports.[55] In a collective case study, the analysis of multiple case studies provides better context to illustrate an issue or

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[55] John W. Creswell, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 3rd ed. (Thousand Oaks, CA: Sage Publications, 2013), 97.

concern.[56] Research from multiple cases provided a detailed description of specific themes within each case, and cross-analysis between the cases supported the development of trends.[57]

This comparative case study, due to limited access of investigations restricted by the Freedom of Information Act, relied heavily on interviews and information gathered by numerous parties and news agencies. Incomplete data, caused by unavailable or misleading information, could have an influence on analysis in chapter 4. Mitigating oversight or omission of facts requires using several resources to back up the information used in research. The goal for this comparative research was to identify like variables related to ASEs and the application of those variables to military case studies to determine if there exists shortfalls within current active shooter defeat methods.

Using military case studies as a foundation produces documents such as investigations that have already encapsulated information from vast sources. These various sources often include in-depth interviews from witnesses gathered during investigations: therefore, providing a firm basis for grounded theory research. Grounded theory is a qualitative research design to generate a general explanation or theory of a process, an action, or an interaction shaped by the views of a large number of participants.[58] The key to grounded theory is data pulled from participants who have experienced the process or action and shaped by a large number of participants.[59] Most

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[56] Creswell, 99.

[57] Ibid., 101.

[58] Ibid., 83.

[59] Ibid.

military investigations are covered in detail and align with grounded theory through inclusion of comprehensive interviewing that also produce unique, succinct, and trustworthy sources. The purpose of this thesis is not to conduct grounded theory research or to produce new active shooter theory, but bring to light active shooter trends from eyewitness accounts that seem to transcend most ASEs.

Thus, this paper focused on case study research to gather current threat practices that might improve security on DoD installations. Specifically, the focus on a rise of HVEs and insider threats that have occasionally penetrated local area security and the few that penetrated DoD defenses. The case studies involved the shootings in 2009 at Fort Hood, in 2013 at the WNY, and in 2015 in Chattanooga; the FBI, the NYPD, and Texas State University conducted the other three comprehensive case studies. In addition, information on foiled attacks could further reinforce the dynamics underpinning the threat. However, after exhaustive research and consultation with FBI officials, foiled attacks are limited in study and access to information is difficult which stems from the lengthy judicial process and limited insight from the lack of full execution.

The information collected from military case studies was limited to the three military case studies in this paper; therefore, generation of data including non-DoD installation ASEs was critical to establish a more comprehensive baseline when analyzing trends associated with the military case studies. The military case studies were mostly investigations conducted by federal employees bound by an ethical code. Therefore, out of necessity to gather sworn statements for the investigation, the documents inherently captured narrative research and phenomenology research through victim experiences. These statements under oath facilitate a more truthful tale of the essence of the active

shooter scenario. The inherent narrative research, or the experiences as expressed in lived and told stories of individuals,[60] and phenomenology research, which help describe the common meaning of several individuals,[61] make federal investigations prime targets for gathering accurate information.

Three comprehensive active shooter reports supplied by the FBI, NYPD, and Texas State University provided research via unclassified, open-source reporting. Each agency's priority was to gather information from federal agencies, then attempt to gather information from local agencies, and then finally relying on Internet resources or local news. Therefore, the three reports accurately assessed that there are potential discrepancies with each report. However, even though the Texas State University study had the lowest sampling of 80 active shooters, that pool is large enough to mitigate any significant deviation of error. These multiple case studies mostly provided quantitative percentage generalizations to support or counter the characteristics of ASEs identified in chapter four.

Even though ASEs and mass shootings have occurred throughout our history, it was the 1999 Columbine High School shooting that sparked interest in active shooter research and mitigation. In the 16 years since, federal agencies, the DoD, local LE, and others have continued to study this phenomenon and develop ways to mitigate the threat. The review of these emerging documents, whether military related or civilian, offered current philosophies and deter/defeat mechanisms that supported recommendations

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[60] Creswell, 70.

[61] Ibid., 76.

towards the primary research question. Some of these documents, like the Air Force UMP, are emerging concepts that have yet to be fully implemented or evaluated.

This study demands a complete and thorough search of published historical data, a wide variety of publications, and current policy to make solid recommendations in this politically sensitive arena. In-depth research of the current and anticipated threats from across multiple sources was necessary to warrant additional case study reviews and the authoring of this thesis. Based on the threat and its consistent pattern, an analysis of military case study supplied formulation of common characteristics in ASEs, and is discussed in detail in chapter 4. Based upon these characteristics it was logical to research current philosophies and mitigation approaches that exist to help deter and defeat future ASEs. These philosophies and theories require further analysis to determine if they could collectively answer the primary research question.

CHAPTER 4

ANALYSIS

> Bottom line, brutal math rules these attacks: People continue to die until the shooter is stopped, and when precious seconds count, the police are only minutes away.
> ― Eric F. McMillin, "An Out-of-the-Box Proposal: Countering Active Shooter Attacks on DOD Installations"

Introduction

This chapter provides research and analysis of the rise in HVEs within the United States, and the troubling reality of increased self-radicalization leading to a rise of even more dangerous military insider threat activity. The HVEs and insider threat combination in conjunction with increased proliferation of assault weapons could lead to degraded, less-focused detection by friendly forces and higher complexity of attacks by the enemy; ASEs leading to higher casualty counts. This chapter analyzes trends in active shooter cases that apply to the military environment to provide better understanding in countering these threats. The collective case studies of the NYPD, Texas State University, and FBI provide general characteristics of ASEs that enable better understanding of those characteristics during events involving military installations like Fort Hood, WNY, and Chattanooga. Finally, it is necessary to compare the threat and its perceived common characteristics to our recent DoD solutions including physical security, AT, emergency management, etc.; and emerging service solutions like the UMP program. Based on the DoD guidance, each of the services has taken a varied approach to mitigating this threat that will be discussed for further recommendation.

Between 2001 and 2013, the terrorism-related convictions of more than 200 U.S. citizens and permanent residents indicated a significant presence of jihad in the country. However, a study by the New America Foundation may overshadow or skew the jihad threat, since they determined that radical groups like white supremacists killed nearly twice as many Americans than Islamist extremists since 2001. Moreover, due to less integration and the sporadic and geographically limited presence of radicalizing agents such as preachers and mosques, America has witnessed less radicalization than France, Great Britain, Belgium, and Denmark. From this comes the claim that the American "jihadist scene," is significantly less complex and efficient than that of most European countries.[62] Whether or not this is true, enough data exists to demonstrate that a major focus of jihad attacks is the military because of its direct impact on foreign policy like Iraq and Afghanistan. The recent attacks on Fort Hood and Chattanooga also demonstrate the reach of jihad and its effective use of narrative through the Internet; refusing the necessity of established and effective safe havens or cells within the United States.

Investigators of the Fort Hood shooting were concerned that none of the military services addressed the education of service members to identify violent Islamic extremism and response protocol. Failure to address violent Islamist extremism by its name could raise the potential for DoD's actions to be inefficient and ineffective. Failure to address this violent Islamist extremism directly and without ambiguity sends a

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[62] Vidino and Hughes, 3.

message across the force and could degrade approaches to countering.[63] Over the past six

years, the DoD has continued to fully investigate and make recommendations to take this

matter seriously. The current domestic operating environment for the military,

specifically with regards to active shooter, revolves around either HVEs or insider

threats, or both. Therefore, this chapter will focus on the threat of Islamic extremism, its

ability to influence, and the subsequent unique danger to the DoD; as well as, the unique

motivations and challenges of the insider threat.

Homegrown Violent Extremist

Al-Qaida continues to be a relevant source of inspiration for global jihad. Al-

Qaida inspired HVE, although assessed to be involved in fewer than 10 domestic plots

per year, will be motivated to engage in violent action by global jihadist propaganda.

Motivation includes events around the world perceived as threatening to Muslims, and

the perceived success of other HVE plots, such as the November 2009 attack at Fort

Hood, [64] and the December 2015 attack in San Bernardino, California. HVE inspired

attacks may also stem from other English-language material, such as Al-Qaeda in the

Arabian Peninsula's *Inspire* magazine.[65] Moreover, the recent rise of organizations like

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[63] Congress, Senate, U.S. Committee on Homeland Security and Governmental
Affairs, *A Ticking Time Bomb: Counterterrorism Lessons From the U.S. Government's
Failure to Prevent the Fort Hood Attack* (Special Report by the U.S. Senate Committee
on Homeland Security and Government Affairs, Washington, DC, 3 February 2011), 48.

[64] Director of National Intelligence, *Statement for the Record: Worldwide Threat
Assessment of the US Intelligence Community* (Senate Select Committee on Intelligence,
Washington, DC, 12 March 2013), 4.

[65] Abu Salih, "Al-Qaeda of the Arabian Peninsula," *Inspire,* no. 10 (Spring 2013):
44-49,

ISIS, and their seemingly effective cyberspace operations, pose even further problems for domestic security.

As of October 2015, ISIS influenced 47 terrorist plots or attacks against the West to include 11 within the United States. The rate of ISIS attacks more than doubled in 2015 compared to the previous year, and there were more U.S. terror based attacks or plots in 2015 than in any year since 9/11. Overall, the number of terror plots has more than tripled in the past five years, and in recent years, LE arrested more than 55 ISIS inspired Americans across 19 states.[66] In 2014, ISIS reports indicated that they intended to use the refugee flow to smuggle ISIS operatives into other countries like a "Trojan Horse." FBI Director James Comey recently said, "authorities have hundreds of open investigations of ISIS inspired extremists that cover all 56 of the Bureau's field offices throughout all fifty states."[67] The Internet has enabled broader radicalization and our nation and allies have to find ways to gain the initiative and get left of the bang.

U.S. intelligence still places significant emphasis on satellite feeds vice an aggressive campaign to scrub Facebook feeds.[68] ISIS aggressively exploits social media and is arguably winning the war to recruit fighters, disseminate propaganda, and trigger attacks in the West. Since the beginning of this year, ISIS has delivered more than 1,700 products including videos, reports, and magazines over social media. There are an estimated 200,000 pro-ISIS messages on Twitter every day. ISIS released its ninth issue

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[66] Congress, House, Committee on Homeland Security, "Terrorist Threat Snapshot," July 2015, accessed 15 October 2015, https://homeland.house.gov/ files/documents/July%20Terror%20Threat%20Snapshot%20_0.pdf, 1.

[67] Vidino and Hughes, 4.

[68] Ibid., vii.

of their magazine *Dabiq* in May 2015 to include articles that praised attacks against Western countries and highly encouraged them to continue,[69] and as of April 2016, they have produced five more publications.[70] The aggressive information operation campaign of ISIS is a bleeding ulcer, and domestic attacks will likely rise if the symptom is treated without regard for the disease.

Even more troubling, the diversity of ISIS's American recruits and the variance in demonstrating their support rejects the notion of a single profile, or a one-stop shop to blunt ISIS's allure.[71] The profiles of American ISIS sympathizers range from grown men who have flirted with jihad over several years to teenagers who have only recently converted to Islam. From the son of a Boston area police officer to a single mother of two young children, these individuals come from varied ethic, social, educational, and economic demographics.[72] ISIS supporters, charged in America, come from a wide range of backgrounds and cultures, and they share a few common characteristics: they were American-born, under age 30, and had no previous history of radical views or activities.[73]

Military facilities and personnel are a common target in jihadist plots to conduct violence within the United States. Nearly a third of the 119 Americans accused of plotting attacks inside the United States since 9/11 were alleged to have plotted attacks on

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[69] Congress, House, Committee on Homeland Security, "Terrorist Threat Snapshot," 8.

[70] Jihadology, "*Dabiq* Magazine," accessed 15 April 2016, http://jihadology.net/category/dabiq-magazine/.

[71] Vidino and Hughes, 33.

[72] Ibid., 15.

[73] Ibid., 2.

U.S. military targets, according to data collected by New America. In 2015, the FBI

foiled an alleged plot inspired by ISIS to attack a military base in Illinois. Hasan

Edmonds; a 22-year-old U.S. citizen, and his cousin Jonas Edmonds; a 29-year-old U.S.

citizen, were arrested. The two allegedly plotted for Hasan, a member of the Illinois

National Guard, to travel to Syria to fight with ISIS while Jonas would carry out an attack

on a military facility. [74] This is yet another example of the continuing and dangerous

trend of self-radicalization leading to violent extremism and potential insider threats.

Insider Threat

In October 2011, President Obama issued an executive order that defined an

insider threat, and while acts of workplace violence were not specifically mentioned in

this definition, they have become a major threat to DoD installations. In 2011, one out of

every five workplace homicides was a government employee, and one out of 115

government employees experienced workplace violence.[75] Although, workplace violence

and the insider threat might not always rise to the active shooter status and mass killings,

the increase in workplace violence and insider threat could easily trend to more mass

shooting type attacks.

Events such as the Fort Hood shooting raised questions about how to identify and

defeat external influences on military personnel before they become capable insider

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[74] Peter Bergen and David Sterman, "A history of attacks against U.S. military installations," *CNN*, 17 July 2015, accessed 28 November 2015, http://www.cnn.com/2015/07/16/opinions/bergen-chattanooga-shooting/.

[75] Secretary of Defense Independent Review Team, "Security from Within: Independent Review of the Washington Navy Yard Shooting" (Report of the Independent Review, Department of Defense, Washington, DC, November 2013), 59.

threats. Investigators of the Fort Hood shooting mentioned that FP has greatly reduced

the impact of external threats since 9/11, but Fort Hood provided the tragedy to enhance

the defense against internal threats.[76] Regardless of the intensity and focus of internal

threat mitigation measures, Major Hasan's specific case demonstrates how clear the

indicators could be, but circumstances exist that allows perpetrators to slip through the

cracks. An instructor and a colleague each referred to Hasan as a "ticking time bomb."

His Officer Evaluation Reports sanitized his obsession with violent Islamist extremism

into praiseworthy research on counterterrorism.[77]

Major Hasan also engaged in the following conduct in little more than one year.

He made three presentations on violent Islamist extremist topics instead of medical

subjects as directed. One of these briefs was immediately stopped by the instructor, as

other students erupted in frustration. According to his classmates, he justified the use of

suicide bombs on two occasions and that some of the actions of Osama bin Laden may

have been justified. He told several classmates that religion took precedence over the

Constitution and that Muslim-Americans in the military could be prone to fratricide.[78] A

list of reasoning as to why this behavior was not problematic included academic freedom

and absence of academic standards, an Army desire to preserve the Uniformed Services

University of the Health Sciences fellowship, a belief that Hasan provided understanding

of violent extremism and culture, and that Hasan could perform admirably under

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[76] DoD, *Protecting the Force*, 2.

[77] Congress, Senate, *A Ticking Time Bomb*, 8.

[78] Ibid., 30-31.

supervision at an Army installation.[79] Regardless of the reasoning for a lack of more aggressive action against Major Hasan, there will always be human judgment that could bring about human error in dealing appropriately with insider threats.

<center>Weapons versus Explosives</center>

In the Spring 2013 issue of *Inspire* magazine, Al-Qaeda in the Arabian Peninsula produced a Mujahid pocketbook, that included seven pages of various tactics, techniques, and procedures for the employment of handguns and AK-47s.[80] On page 51 of the pocketbook, Al-Qaeda in the Arabian Peninsula lays out tips for their brothers in the United States about how to maintain a low profile and execute successful attacks. The pocketbook describes the firearm operation as the least suspicious for those that already own firearms. The pocketbook also recommends that carrying out attacks in crowded areas would benefit from more public attention and media. The firearm operation provides unique advantages because the operation is simple and is less likely the FBI will intercept them before attack execution.[81]

Prior to and just after 9/11, explosives were the weapons of choice for jihad; but the last several years have closed with greater instances of mass shootings, like high-profile attacks in France and on the magazine company Charlie Hebdo; in Sousse and Tunis, Tunisia; in Garissa, Kenya; Copenhagen, Denmark and most recently in San Bernardino and Paris, France. In the Paris attacks, initial reports indicate that assault

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[79] Congress, Senate, *A Ticking Time Bomb*, 31-32.

[80] Salih, 44-49.

[81] Ibid., 53.

rifles killed and injured more people than explosives. According to Michael Hodges, author of *AK47: The Story of the People's Gun*, "there may be as many as 200 million Kalashnikovs in the world, one for every 35 people."[82]

The increased presence of assault weapons in conjunction with other reasons indicate why violent extremists have turned to more small arms tactics in recent years. Manufacturing in more than 30 countries makes them more available, they are easier to get than explosives, they kill or injure a lot of people in a short time, [83] they usually continue until stopped by armed response or ammunition is depleted, and explosives are one bang and done whereas gunmen have guided munitions. According to the 2015 European Union terrorism situation and trend report, firearms have become the most prevalent form of weaponry in terror attacks in the European Union.[84] The increased production of Kalashnikovs across the globe will likely have ripple effects in the United States. The combination of assault weapons production both overseas and within the United States will continue to present challenges, including the potential for increased active shooter plots, for agencies concerned with stopping those acts of violence.

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[82] Michael Hodges, quoted in Sandra Laville, Jason Burke, and Ana Bogavac, "Why has the AK-47 become the jihadi terrorist weapon of choice?" *The Guardian*, 29 December 2015, accessed 10 March 2106, http://www.theguardian.com/world/2015/dec/29/why-jihadi-terrorists-swapped-suicide-belts-kalashnikov-ak-47s.

[83] Ibid.

[84] European Law Enforcement Agency, *TE-SAT 2015, European Union Terrorism Situation and Trend Report 2015* (The Netherlands: European Police Office, 2015), 9.

Overwhelming the Friendly Force

An FBI study found that ASEs are on the rise occurring at a rate of 6.4 annually

between 2000 and 2007, to an annual rate of 16.4 by 2013.[85] The NYPD has not observed

evidence of an increase in active shooter incidents in the United States from 2006 to

2012. However, there is some evidence that active shooter incidents in the United States

have become more frequent since 2000; five out of six years between 2000 and 2005 had

lower incident counts than the quietest year between 2006 and 2012.[86] Regardless of the

level of vigilance, technology, and procedure, the chance of another active shooter on a

DoD installation remains at an all-time high.

In an independent investigation to Congress from the Fort Hood shooting of 2009,

the FBI received praise for their performance in spoiling terrorist attacks in the 10 years

since 9/11. "We recognize that detection and interdiction of lone wolf terrorists is one of

the most difficult challenges facing LE and intelligence agencies."[87] Every day, the FBI

must apply judgment to the highest priority cases and determine the most imminent.

Wherever there is human judgment there also exists the potential for risk. Events like the

Fort Hood shooting demonstrate the difficulty, given the fact that Major Hasan was a

military officer and U.S. citizen. Additional complexity is involved when the Constitution

appropriately limits the actions that government can take, even when there is evidence

that a U.S. citizen may be radicalizing.[88]

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[85] Blair and Schweit, 8.

[86] NYPD, 9.

[87] Congress, Senate, *A Ticking Time Bomb,* 7.

[88] Congress, Senate, *A Ticking Time Bomb,* 7.

Threat Conclusion

This type of threat appears to be growing and morphing; especially given the rise of ISIS and their Internet messaging. A globalized and inter-connected world has provided a larger recruiting pool for terrorist and extremist organizations. The number of people radicalizing and the faster pace between radicalization and action should be disturbing to all Americans. The increased use of lower detection plots, i.e. preferring small arms attacks rather than weapons, complicates the matter even further. HVE or insider threats can now appear anywhere, anytime with little or no warning. Protecting our service men and women has been and must continue to be a top priority. No matter how politically sensitive, the nation and DoD leaders need to remain focused on genuinely understanding the threat, continue to turn the map and look from the enemy perspective, and remain open to fresh, out-of-the-box ideas and approaches.

Active Shooter Characteristics

In DoD's Joint Publication 2-01.3, *Joint Intelligence Preparation of the Operational Environment,* understanding the operational environment requires a holistic view that encompasses physical areas and the information environment to include cyberspace. The military uses the Political, Military, Economic, Social, Infrastructure, and Information (PMESII) methodology to understand both friendly and enemy systems that are relevant to a specific joint operation. Understanding the operational variables or PMESII; therefore, is critical to avoiding undesired effects while meeting the commander's objectives and endstate.[89] Like PMESII analysis, a review of documents

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[89] Joint Chiefs of Staff, JP 1-02, I-2.

involving active shooters help shape the active shooter environment. ASEs appear to encompass certain characteristics, although each of them varies from event to event. The following section will analyze the three military active shooter case studies, Fort Hood, WNY, and Chattanooga, to draw similarities in characteristics and weigh those against trends found with collective case studies of the FBI, NYPD, and Texas State University.

Major Sean K. Hubbard and Major Charles E. Ergenbright, in their study of active shooters at Institutions of Higher Education, provided great insight into characteristics of ASEs from their case studies. First, acts of extreme violence will occur and cannot be fully prevented because of human judgment and the potential for miscalculation or error. Second, a delay will always exist between the initiation of an ASE and the arrival of first responders. Third, individuals in the vicinity of the threat, or potential victims, are the only ones that can act immediately. Fourth, the shooter possesses the initiative beginning with preparation until an individual in the immediate area, or a first responder steals it or wrestles it away.[90] These characteristics appear universal to every ASE and provide a great baseline for analysis; furthermore, they drove the development of other characteristics relevant to the thesis question. The other characteristics in consideration during ASEs include indiscriminate targeting or random killing of victims, shooter profile, casualty rates, time-sensitive nature, target location, complexity, and termination criteria. Each of these characteristics warrants their separate discussion later in this chapter. However, shooter initiative contains the elements of both human judgment and

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[90] Major Sean K. Hubbard and Major Charles E. Ergenbright, "Defeating the Active Shooter: Applying Facility Upgrades in Order to Mitigate the Effects of Active Shooters in High Occupancy Facilities" (Thesis, Naval Postgraduate School, Monterey, CA, June 2012), 129.

shooter preparation. These are collectively discussed later in this chapter, along with response delay and time-sensitive nature. Beginning with shooter profile, the characteristics appear in the most logical flow of an ASE to ease understanding.

Shooter Profile

The 2012 NYPD study concluded that most active shooters are overwhelmingly male, only eight of the 230 ASEs involved females.[91] The age of the attacker varies, but attackers against schools peaked at ages 15-19, while the ages of attackers outside schools peaked at 35-44 years of age. The numbers of attackers has remained overwhelmingly constant at one through 98 percent of the cases. Planning tactics varied from little to no planning and very impulsive, to detailed planning and even attempts to barricade potential victims from leaving and first responders from entering. The NYPD organized relationships between attackers and victims into five categories: professional, academic, familial, other, and none. Of the attacks, victims had personal relationships 38 percent of the time, followed by none at 26 percent, academic at 22 percent, other at 8 percent, and familial at 6 percent.[92] The Texas State University study concluded that the most commonly used weapon was a pistol (60 percent), followed by rifles (27 percent), and shotguns at (10 percent).[93]

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[91] NYPD, 4.

[92] Hubbard and Ergenbright, 5-6.

[93] Blair and Martaindale, 2.

Shooter Preparation

Radicalization continues to challenge the ability of intelligence agencies to identify and act in time to detect and deter attacks. The protection of radicalism, considered free speech by our Constitution is a major obstacle facing our LE agencies. Furthermore, without intent to do violence it does not constitute a threat; and therefore, not a crime. Major Nidal Malik Hasan's transformation from radical to terrorist is a great example of an evolving active shooter, and underscores the dilemma confronting LE agencies. Hasan was a licensed psychiatrist and a U.S. Army major, and a member of two professional communities who protect against violence. He had no known interaction with criminal networks or terrorist networks outside of 18 emails to Anwar al-Aulaqi.[94] The following is an excerpt from the Webster Commission that demonstrates the human judgment involved in the process, "This is not SD (San Diego), it's DC and WFO (Washington Field Office) doesn't go out and interview every Muslim guy who visits extremist websites. Besides, this guy has legitimate work related reasons to be going to these sites and engaging these extremists in dialogue. WFO did not assess this guy as a terrorism threat."[95] The challenge for the FBI, other LE, and the military chain of command lies in discovering actionable indicators in time to lawfully respond to the potential for violence.

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[94] William H. Webster Commission, *Final Report of the William H. Webster Commission on the Federal Bureau of Investigation, Counterterrorism Intelligence, and the Events at Fort Hood, Texas, on November 5, 2009,* accessed 2 May 2016, http://ctcitraining.org/docs/FBI_FinalReport_FortHoodTX.pdf, 6-8.

[95] Ibid., 60.

The early phases of radicalization may occur quietly and privately, and investigation into beliefs may constitute an invasion of the person's civil rights; thus demand investigative restraint. The opportunity to radicalize is not a justification for investigation, like legally downloading a sermon or joining peaceful demonstrations. If an individual demonstrates no violent tendencies, even if they express the opinion that their cause requires action, it does not warrant investigation. Detecting violent extremists prior to the attack remains difficult because the stages of radicalization progress at different speeds in each individual case. Pre-radicalization and identification may take years, is difficult to detect, and may not warrant investigation. Indoctrination and operationalization can happen in days, and prevent enough time to effectively engage before violence occurs.[96] To aggravate matters, DoD's mental health care providers and Chaplains are limited in what they can report to the chain of command should potential insider threats pursue mental health or spiritual consultation.

The Health Insurance Portability and Accountability Act was a federal law passed in 1996 that sought to protect medical records and other personal health information.[97] The DoD has taken this a step further to foster a culture of support in health care and drive voluntary treatment in order to dispel the stigma of potentially negative consequences of seeking health care. Therefore, a health care provider's first presumption is not to notify the chain of command when a service member receives health care. Health care providers gain insight into their reporting presumptions by following a list of

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[96] Webster Commission, *Final Report*, 6-8.

[97] Southern University and Agricultural and Mechanical College, "What is HIPPA?" accessed 5 April 2016, http://www.subr.edu/assets/docs/HealthCenter/ What_IS_HIPPA.pdf.

notification standards in DoD Instruction 6490.08, Subject: Command Notification

Requirements to Dispel Stigma in Providing Mental Health Care to Service Members.

Health care providers shall only provide the minimum amount of disclosure to satisfy the

notification standard concerned.[98]

Within the active shooter realm; fortunately, there exists two notification

standards labeled 'harm to self' and 'harm to others'. In assessing harm to self and harm

to others the health care provider believes there is a serious risk of harm to self or others

as a result of the visit; including notification when allegations of child abuse or domestic

violence incidents surface.[99] The attempt of DoD to facilitate mental health care thus

provides a potential threat a means to remain undetected. Mental health care providers

will likely proceed with extreme caution and err on the side of that caution when

determining whether or not to report up the chain of command.

Location

The FBI's study of 2013 breaks down ASEs in areas of commerce on 73

occasions or 45 percent of the time, and areas open to pedestrians on more than half of

those occasions. Schools were the second highest involving 39 ASEs or 25 percent. The

remaining 30 percent involved government facilities, churches, health care facilities, and

residences.[100] However, for the purpose of this study, it is important to note that out of

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[98] Undersecretary of Defense for Personnel and Readiness, Department of
Defense Instruction 6490.08, *Command Notification Requirements to Dispel Stigma in
Providing Mental Health Care to Service Members* (Washington, DC: Department of
Defense, April 2011), 1.

[99] Ibid., 5.

[100] Blair and Schweit, 13.

the 160 incidents, only 10 percent were on government property, with only 3 percent on military installations.[101] A 2013 active shooter study conducted by the Texas State University found that business locations were the most frequently attacked (37 percent), followed by schools (34 percent), and public (outdoor) venues (17 percent). The 2012 NYPD study found that 68 or 24 percent of the events occurred at schools, events within office buildings 31 times or 11 percent, events in open commercial areas 67 times or 24 percent, events in factories or warehouses 33 times or 12 percent, and events at other places 80 times or 29 percent.[102] From a different perspective, *The New York Times* noted that 81 percent of ASEs occur during working hours before 6:00 p.m. In contrast, the majority of murders take place in the evening demonstrating active shooter ability to target and gain access to the site.[103] From this data, it appears that active shooters chose softer target locations because they provided a target rich environment.

In his article concerning the ASE at the Cinemark Theater in Aurora, Colorado, John Lott presumes the shooter chose that specific theater because a sign out front banned guns, in other words, because the location was a soft target. The theater was not closest to the shooter or had the biggest audience, and according to Lott it was the only theater within 20 minutes that banned guns.[104] The recruiting center in Chattanooga that

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[101] Ibid., 13.

[102] NYPD, 7-8.

[103] Ford Fessenden, "They threaten, seethe and unhinge, then kill in quantity," *The New York Times*, 9 April 2000, accessed 21 November 2015, http://www.nytimes.com/library/national/040900rampage-killers.html.

[104] John R. Lott, "Did the Colorado shooter single out Cinemark theater because it banned guns?" *Fox News*, 10 September 2012, accessed 23 February 2016,

Mohammad Abdulazeez fired upon had a clear sign for "no guns" in the building.[105] In

their article, "Mitigating Active Shooter Impact; Analysis for Policy Options Based on

Agent/Computer Based Modeling," the authors discuss the term "crime spillover"

implying that areas where concealed carry is authorized start to realize lower violent

crime rates versus those that do not.[106] This may help explain why attacks on police

stations and military installations remain few in number; regardless, analysis will

determine if active shooters took advantage of potential softer target locations on military

installations.

<center>Delay and Time Sensitive Nature</center>

In a study concerning active shooter incidents at institutions of higher education,

the average active shooter incident lasted 12.5 minutes and average response was 18

minutes.[107] A private company, MSA Worldview stated, "more than half of active

shooter incidents are terminated in 12 minutes."[108] However, a local level police

department in 2010 claimed that the recent average duration of an active shooter was less

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http://www.foxnews.com/opinion/2012/09/10/did-colorado-shooter-single-out-cinemark-theater.html.

[105] Rachelle Blinder, "Chattanooga shooting renews debate over gun-free zones," *New York Daily News,* 17 July 2015, accessed 15 January 2016, http://www.nydailynews.com/news/national/chattanooga-shooting-renews-debate-gun-free-zones-article-1.2295643.

[106] Anklam et al., 5.

[107] Hubbard and Ergenbright, v.

[108] MSA Worldview, "Special analysis: The active shooter threat," MSA Security.net, 21 August 2012, accessed 15 January 2016, http://www.msasecurity.net/security-and-counterterrorism-blog/bid/86354/MSA-Special-Analysis-The-Active-Shooter-Threat.

<center>51</center>

than three minutes.[109] The authors of "Mitigating Active Shooter Impact; Analysis for Policy Options Based on Agent/Computer Based Modeling" also conclude from data collected on 24 school and 41 workplace shootings that average ASEs lasted three to four minutes with an average of one casualty every 15 seconds, and police response times range from five to six minutes.[110] The FBI's 2013 active shooter case study reflected the damage sustained in a matter of minutes. Where realistically estimated, 70 percent of ASEs ended in five minutes or less. Even with LE responding within minutes, civilians had to make life and death decisions.[111] More important than the average length of ASE duration is that studies show that casualties are usually much higher early in the attack and start to decrease as victims apply strategies and disperse.

Victim Response

The DHS presents emerging techniques, tactics, and procedures for surviving an active shooter threat in their *Active Shooter How to Respond* manual. DHS concludes that most ASEs are over within 10 to 15 minutes, and before LE arrive, so individuals must prepare for these events.[112] They suggest broad actions including awareness of your environment and any possible dangers, taking note of the nearest exits in any facility, staying in your office and securing the door, and attempting to take the active shooter

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[109] Prattville, "Special Ops Trains Officers through Active Shooter Exercise," 22 July 2010, accessed 15 January 2016, http://www.prattvilleal.gov/news/ppd-special-ops-trains-officers-through-active-shooter-exercise.html.

[110] Anklam et al., 6.

[111] Blair and Schweit, 8.

[112] DHS, "Active Shooter: How to Respond," 3.

down as a last resort.[113] The methodology for survival in an ASE is to Run, Hide, and

Fight. During the run phase use a pre-planned escape route, leave your belongings

behind, prevent others from entering the active shooter area, and keep your hands visible

for first responders to distinguish. During the hide phase, if evacuation is not possible;

find an area out of the shooter's view, block entry to your hiding place and lock the

doors, and silence your cell phone. As a last resort and only in imminent danger, during

the fight phase attempt to incapacitate the shooter, act with physical aggression, throw

items at the active shooter, improvise and use all available weapons.[114]

<div align="center">Casualties</div>

The Texas State University study found the median number of people killed

during ASEs was two, and the median number shot was four.[115] The NYPD study found

the median number killed was two and the average was 3.1, and the median number of

wounded was two and the average was 3.9.[116] However, casualties tend to be higher

during attacks on the military. In a study of attacks against the federal government, three

shootings accounted for 81% of the casualties caused by firearms. These three incidents

included the November 2009 attack by Major Nidal Hasan causing 45 casualties, the

January 2011 attack by Jared Loughner causing 18 casualties, and the September 2013

attack by Aaron Alexis causing 16 casualties. The other nine firearm attacks produced

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[113] DHS, "Active Shooter: How to Respond," 3.

[114] Ibid., 4-5.

[115] Blair and Martaindale, 2.

[116] NYPD, 6-7.

one to four casualties[117] resembling statistics consistent with the Texas State University

and NYPD studies.

<center>Attack Termination</center>

The 2012 NYPD study organized data on termination of the active shooter into

four categories: applied force, no applied force, suicide or attempted suicide, and attacker

fled. The vast majority of attacks in the active shooter data set ended violently, whether

by LE, victims, or the attacker himself. Of the attacks, only 37 occasions or 16 percent

ended without violence such as a negotiated surrender. Of the other events, violent force

from responders or victims occurred on 99 occasions or 43 percent, the attacker

committed suicide or attempted suicide on 93 occasions or 40 percent, and the attacker

fled less than 1 percent of the time.[118]

The Texas State University study concluded that police used force to stop the

killing in 28 percent of all the ASEs identified. Responders or police applied deadly force

in the majority (71 percent) of these cases. While it is true that many active shooters will

kill themselves, either before the police arrive, or when the attacker becomes aware that

the police are on scene, the shooter aggressively fights the responding police officers in

many cases. Officers need training in tactics that will allow them to defeat the shooter

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[117] National Threat Assessment Center, *Attacks on Federal Government 2001 to 2013: Threat Assessment Considerations* (Washington, DC: U.S. Secret Service, Department of Homeland Security, December 2015), 29.

[118] NYPD, 9.

<center>54</center>

should it become necessary. It is not enough to simply hope that the attacker has or will commit suicide.[119]

The 2013 FBI study found that 70 percent of ASEs ended prior to the arrival of police, because a citizen intervened, the shooter fled, the shooter committed suicide, or someone at the scene killed the shooter.[120] The study also concluded that the majority of the 160 active shooter incidents since 2000, (90 or 56.3 percent) ended on the shooter's initiative. The shooter either committed suicide or stopped shooting, and other times the shooter fled the scene. In at least 65 (40.6 percent) of the 160 incidents, citizen engagement or the shooter committing suicide ended the shooting before LE arrived. In 37 incidents (23.1 percent), the shooter committed suicide at the scene before police arrived. In 45 (28.1 percent) of the 160 incidents, LE and the shooter exchanged gunfire. Of those 45 incidents, LE killed the shooter at the scene in 21, killed the shooter at another location in four, wounded the shooter in nine, the shooter-committed suicide in nine, and the shooter surrendered in two.[121] LE suffered casualties in 21 (46.7 percent) of the 45 incidents where they engaged the shooter to end the threat.[122] The rest of the percentages belong to victim-initiated responses before the police arrived.

In 21 incidents (13.1 percent), the situation ended after unarmed citizens safely and successfully restrained the shooter. Of note, 11 of the incidents involved unarmed principals, teachers, other school staff and students who confronted shooters to end the

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[119] Blair and Martaindale, 8.

[120] Blair and Schweit, 10.

[121] Ibid., 11.

[122] Ibid., 12.

threat. In five incidents (3.1 percent), the shooting ended after armed individuals who were not LE personnel exchanged gunfire with the shooters. In two incidents (1.3 percent), two armed, off-duty police officers engaged the shooters, resulting in the death of the shooters.[123] This data demonstrates that almost 20 percent of the time the victims took measures to fight the threat, and that victims must be ready to do so in the future.

<div align="center">Complexity</div>

In their study of active shooters from 2000 to 2010, the authors of *Active Shooter Events and Response*, identify three levels of complexity during ASEs. The basic level of complexity involves one active shooter armed with a pistol as the sole weapon and confined to one location; approximately 42 percent of the ASEs fell into this category. Moderate complexity refers to events that involved two or more of the following type criteria: more than one shooter, multiple locations, using barricades, explosives, shooters with body armor, or armed with more than a pistol; the rest of the 58 percent of ASEs fell into this category.[124] The last category is high complexity defined as multiple teams, attacking multiple locations simultaneously demonstrating quality tactics and close coordination. A high complexity attack occurred on 26 November 2008, when 10 men operating with assault rifles and explosives attacked the city of Mumbai, India for over 60 hours. At the end of the 60 hours, the attackers killed 161 people and wounded over 300.[125] The attacks at Nairobi, Kenya and Paris, France fall into this category as well.

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[123] Blair and Schweit, 11.

[124] Blair et al., 63-64.

[125] Ibid., 35-36.

Fortunately, the United States has yet to experience a high complexity active shooter attack within its borders, but these recent events and the threat analysis cast doubt that this will remain the status quo.

Characteristics Conclusion

A comprehensive study of documents and collective case studies involving active shooters helped shape these characteristics used to further analyze individual military case studies. Applying and analyzing the characteristics to each of the military case studies: Fort Hood, WNY, and Chattanooga, will provide context for analysis of current active shooter defeat mechanisms concerning military doctrine, physical security standards, and other civilian best practices.

Military Case Studies

Fort Hood

On 5 November 2009, Major Nidal Hasan opened fire at the Soldier Readiness Center at Fort Hood.[126] As indicated in the insider threat portion above, Major Hasan had made comments to his colleagues both at the Uniformed Services University of the Health Sciences and Fort Hood that should have attracted attention of potential future violence. Results from the investigation also concluded that Major Hasan had a history of depression, frustration, anger, fear, and anxiety.[127] The results from investigations

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[126] DoD, *Protecting the Force*, 1.

[127] Samual Mayhugh, Ph.D., "Active Shooters: Behavior, Conditions, and Situations" (Active Shooter Awareness Virtual Roundtable, Washington, DC, 27 September 2011), accessed 15 December 2015, http://www.visualwebcaster.com/image Slides/81820/Active%20Shooter%20Awareness%20Slides_Sept%2027_Mayhugh.pdf, 33.

already concluded that both Army officials and the FBI were aware of his religious views

and coordination with Anwar al-Aulaqi. This supports the characteristic of human

judgment, and its inherent lack of perfection, leading to miscalculation before the attack.

Not only does this potential error in human judgment provide opportunity for the

attacker, but they also enjoy the pleasure of time and resources to ready for the attack.

According to Army Specialist William Gilbert, a regular customer at a local gun store in

the town of Killeen, Texas, Major Hasan asked for the most technologically advanced

weapon with the highest magazine capacity. On 31 July 2009, according to pretrial

testimony, Major Hasan purchased the FN 5.7 semi-automatic pistol that he was to use in

the attack at Fort Hood.[128] He visited the store once a week to buy extra magazines along

with over 3,000 rounds of ammunition.[129] In the weeks prior to the attack, Major Hasan

visited an outdoor shooting range near Fort Hood, where he allegedly became proficient

hitting targets at close range up to 100 yards.[130] His particular gun purchase, range

training, the fact that he was a military officer and doctor offered him a great advantage

over his future victims and satisfies the characteristic of shooter preparation.

At approximately 1:34 p.m. local time, 5 November 2009, Major Hasan entered

the Soldier Readiness Processing Center where personnel conduct pre-deployment

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[128] Scott Huddleston, "Hasan sought gun with 'high magazine capacity'," *MySanAntonio*, 12 October 2010, accessed 15 December 2015, http://blog.mysanantonio. com/military/2010/10/hasan-sought-gun-with-high-magazine-capacity/.

[129] Amanda Kim Stairrett, "Prosecutors end case in Hasan Article 32 hearing," *KDH News*, 22 October 2010, accessed 15 December 2015, http://kdhnews.com/news/ prosecutors-end-case-in-hasan-article-hearing/article_c2cea5e3-063c-5bb4-a978-3cb69bae0501.html.

[130] Huddleston.

preparation.[131] According to eyewitnesses, Major Hasan sat down at a table, then stood up and shouted "*Allah Akbar*!" and opened fire.[132] Witnesses said Major Hasan initially sprayed bullets in all directions in a 360-degree motion before targeting individuals.[133] Eyewitness Sergeant Michael Davis said the rate of fire was constant and sounded like an M16.[134] Captain John Gaffaney and civilian physician assistant Michael Cahill tried to stop Hasan by charging him, but were both mortally wounded before reaching him. Army Reserve Specialist Logan Burnett also tried to stop Major Hasan with a folding table when he was shot and forced to crawl away.[135] Interestingly, according to testimony from

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[131] Philip Sherwell and Nick Allen, "Fort Hood shooting: inside story of how massacre on military base happened," *The Telegraph*, 7 November 2009, accessed 2 May 2016, http://www.telegraph.co.uk/news/worldnews/northamerica/usa/6521578/Fort-Hood-shooting-inside-story-of-how-massacre-on-military-base-happened.html.

[132] Ibid.

[133] Jeremy Schwartz, "Witnesses in Fort Hood shooting hearing say Hasan returned to shoot same victims over and over," Statesman*,* 15 October 2010, accessed 27 December 2015, http://www.statesman.com/news/news/state-regional/witnesses-in-fort-hood-shooting-hearing-say-hasan-/nRykN/.

[134] KWTX-TV News, "Hasan Hearing Blog Tuesday Oct. 19, 2010," accessed 15 December 2015, http://www.kwtx.com/news/misc/Hasan_Hearing_Blog_Tuesday_Oct_19_2010_105303923.html.

[135] CNN, "Wounded Fort Hood soldier: 'Blood just everywhere'," 12 November 2009, accessed 15 December 2015, http://www.cnn.com/2009/US/11/12/fort.hood.wounded.soldier/index.html; NPR, "Testimony Begins In Fort Hood Shooting," Transcript, Mary Louis Kelly and Wade Goodwyn, All Things Considered, 13 October 2010, accessed 15 December 2015, http://www.npr.org/templates/story/story.php?storyId=130543304; Josh Rubin, Jason Hanna, and Chelsea J. Carter, "Nidal Hasan's attorneys still trying to leave case," *CNN*, 9 August 2013, accessed 2 May 2016, http://www.cnn.com/2013/08/09/justice/hasan-court-martial/.

witnesses, Major Hasan passed up opportunities to shoot civilians and focused primarily on service members.[136]

An estimated 300 military personnel were at the Soldier Readiness Processing Center the day of the shooting. Witnesses spoke of the methodical way Major Hasan conducted the rampage. About 300 soldiers waited to get shots and eye testing at the facility when gunfire erupted. Base Commander Lieutenant General Robert Cone told Fox News Friday, "It seems like a very high number of people for a single shooter." Soldiers present at the shooting said the shooter could move rapidly and fire at close distance, and that ricochet fire may have led to further casualties.[137] During testimony, an investigator reported 146 spent shell casings recovered inside the building and another 68 casings recovered outside. Major Hasan still had 177 rounds of unfired ammunition contained in both 20- and 30-round magazines.[138] The incident resulted in 13 killed to include 12 soldiers and one civilian; and over 30 people wounded including one civilian police officer.[139] This information seems to reinforce the characteristics of victim response and indiscriminate targeting.

[136] David Zucchino, "Police officers describe Fort Hood gunfight," *Los Angeles Times*, 21 October 2010, accessed 15 December 2015, http://articles.latimes.com/ 2010/oct/21/nation/la-na-fort-hood-20101021.

[137] Fox News, "Suspected Fort Hood Shooter Was 'Calm' During Massacre, May Have Shouted 'God Is Great!'," 7 November 2009, accessed 24 December 2015, http://www.foxnews.com/story/2009/11/07/suspected-fort-hood-shooter-was-calm-during-massacre-may-have-shouted-god-is.html.

[138] Charles Keyes, "Fort Hood witness says he feared there were more gunmen," *CNN*, 20 October 2010, accessed 15 December 2015, http://www.cnn.com/2010/CRIME/ 10/20/texas.fort.hood.shootings/.

[139] NBC News and MSNBC, "Gunman kills 12, wounds 31 at Fort Hood: Army psychiatrist identified as shooter captured alive, general says," updated 5 November

After the initial 911 call on 5 November 2009, DoD LE arrived on the scene within three minutes, and incapacitated the shooter just over a minute later. Ambulances and incident command vehicles arrived on the scene almost three minutes later. Although first responders were quick to arrive on the scene, most of the killing was done; 13 people were killed and another 30 wounded by the time they arrived,[140] and reinforces the characteristic of delay between initiation and first responders. Two civilian police officers that had been directing traffic on the base responded to the 911 call. Sergeant Kim Munley and Sergeant Mark Todd arrived in separate vehicles, as Major Hasan left the Soldier Readiness Processing Center still firing. The officers separately began to pursue the suspect when Major Hasan shot Sergeant Munley, and then Sergeant Todd shot Major Hasan while he was re-loading.[141]

Major Hasan was a 39-year old male[142] who acted alone and used one pistol for the killing, although authorities found a 357 magnum on his person that was not used.[143] The Soldier Readiness Processing Center had approximately 300 people there that day

2009, accessed 15 December 2015, http://www.nbcnews.com/id/33678801/ns/us_news-crime_and_courts/?GT1=43001#.VyLXamOrhFI.

[140] DoD, *Protecting the Force*, 1.

[141] Manny Fernandez, "Sergeant Who Confronted Fort Hood Gunman Faces Him in Court," *The New York Times*, 16 August 2013, accessed 15 December 2015, http://www.nytimes.com/2013/08/17/us/sergeant-who-shot-fort-hood-gunman-testifies-in-trial.html?_r=0.

[142] Greg Janda, "Fort Hood Shooter Nidal Hasan Dishonorably Discharged, No Longer Major," *NBCDFW*, 7 September 2013, accessed 15 December 2015, http://www.nbcdfw.com/news/local/Hasan-Dishonorably-Discharged.html.

[143] CBS News, "Prosecution to Rest in Ft. Hood Massacre Trial," 21 October 2010, accessed 22 December 2015, http://www.cbsnews.com/news/prosecution-to-rest-in-ft-hood-massacre-trial/.

and was a location known to lack armed guards. This indicates a soft target location with the potential for higher casualties. These results align with NYPD generalities of active shooter profile in terms of age group, sex, type of weapon, and target location. The casualties produced at Fort Hood were the most on a U.S. military base in U.S. history and dwarfs the average number of killed and wounded in the collective case studies. The fact that Major Hasan acted alone and with a pistol means the complexity of the attack was at the lowest level. Finally, most of the casualties took place in the first three minutes, and although there were attempts to disarm the shooter by unarmed victims on the scene, the Fort Hood shooting ended when armed police engaged the threat.

The Army's Internal Review suggested that Fort Hood's use of an active shooter response model saved lives. Prior mass casualty management and training, investment in emergency equipment, and coordination with civilian LE and emergency response personnel made a difference.[144] Yet even with this training, Hasan fatally shot 13 people and wounded more than 30 in a matter of minutes. Arguably, the brave actions of service men killed in the attack saved lives, and the rapid response of Fort Hood police in the area helped to reduce casualties. The question remains, how many lives did unarmed soldiers and immediate police response save?

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[144] Secretary of the Army, *Fort Hood Army Internal Review Team: Final Report.* (Washington, DC: Department of the Army, 4 August 2010), 3.

Washington Navy Yard

Police identified Aaron Alexis, a 34-year-old civilian contractor, as the sole

gunman[145] on 16 September 2013 during the shooting at the WNY. Alexis, a Navy

contracted employee with a secret security clearance, shot and killed 12 U.S. Navy

civilian and contractor employees and wounded three others.[146] Alexis' Navy command

issued him a secret clearance on active duty, but did not report incidents of adverse

information during that time. Alexis' employer, The Experts, Inc., thus had no insight

into Alexis' issues during his Navy service when they hired him; subsequently, allowing

him a position that required clearance. In addition, Alexis' employer did not report

ongoing behaviors indicating psychological instability to the proper health professionals

or defense security personnel.[147] These instances reinforce the characteristic of human

judgment in reporting and taking action against potential threats.

According to a Navy official, authorities cited Alexis on at least eight occasions

for misconduct before and during his time in the Navy;[148] however, none of Alexis'

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[145] Carol Morello, Peter Hermann, and Clarence Williams, "At least 13 dead in Navy Yard shooting; possible suspect at large," *The Washington Post*, 16 September 2013, accessed 18 January 2016, https://www.washingtonpost.com/local/police-search-for-active-shooter-on-grounds-of-washington-navy-yard-in-southeast-dc/2013/09/16/b1d72b9a-1ecb-11e3-b7d1-7153ad47b549_story.html.

[146] Undersecretary of Defense for Intelligence, *Internal Review of Washington Navy Yard Shooting: A Report to the Secretary of Defens*e (Washington, DC: Department of Defense, 20 November 2013), 1.

[147] DoD, *Internal Review of Washington Navy Yard Shooting*, 3.

[148] The Washington Post, "Washington Navy Yard shooting," 17 September 2013, accessed 18 January 2016, https://www.washingtonpost.com/blogs/liveblog-live/liveblog-shooting-at-washington-navy-yard/?Post+generic=%253Ftid%253Dsm_twitter_washingtonpost%233e136c0b-c174-4b53-9ba4-cfc9d4a14733.

arrests led to prosecution.[149] After the WNY shooting, the media reported that Alexis had

filed a police report on 2 August 2013 claiming he was hearing voices in his head.[150] On

4 August 2013, naval police arrived at Alexis' hotel room while he was working as a

contractor on base. They found his bed apart because he believed forces were under it and

a microphone attached to the ceiling to record the voices that were talking to him.[151]

On 28 August, he sought treatment for insomnia, but told doctors he was not

depressed and not thinking about harming others.[152] Right or wrong, Alexis' chain of

command in the service and in the civilian sector had opportunities to address his issues,

but the result was a continued secret security clearance and an ASE. Failure to address

the issues allowed Alexis to gain the initiative and conduct actions to capitalize on that

initiative.

On 14 September 2013, two days prior to the shooting, Alexis visited the

Sharpshooters Small Arms Range in Lorton, Virginia. He tested an AR-15 semiautomatic

[149] Murray Weiss and Ben Fractenberg, "Aaron Alexis, New York Native And Alleged DC Gunman, Once Had Rifle Permit From NYPD," *The Huffington Post,* 17 September 2013, accessed 18 January 2016, http://www.huffingtonpost.com/2013/09/17/ aaron-alexis-new-york-dc-gunman-_n_3940823.html?utm_hp_ref=new-york.

[150] Eric Tucker, "Aaron Alexis, Navy Yard Shooting Suspect, Thought People Followed Him With Microwave Machine," *The Huffington Post*, 18 September 2013, accessed 18 January 2016, http://www.wildabouttrial.com/one_off/aaron-alexis-navy-yard-shooting-suspect-thought-people-followed-him-with-microwave-machine/.

[151] Tom Vanden Brook, "Report: Concerns about Navy Yard shooter never reported," *USA Today*, 18 March 2014, accessed 18 January 2016, http://www.usatoday.com/story/news/nation/2014/03/18/navy-yard-shooter-called-insider-threat/6558373/.

[152] Steve Vogel, Sari Horwitz, and David A. Fahrenthold, "Navy Yard gunman Aaron Alexis told VA doctors he was not thinking of harming others," *The Washington Post,* 18 September 2013, accessed 18 January 2016, https://www.washingtonpost.com/ politics/2013/09/18/aee01b22-20a6-11e3-b73c-aab60bf735d0_story.html.

rifle without seeking to buy it and inquired about buying a handgun; however, federal law

prohibited the direct sale of handguns to out-of-state citizens. Instead, Alexis purchased a

tactical 12-gauge shotgun and two boxes of shells following a federal background

check.[153] The combination of human judgment and Alexis' ability to test fire, inquire

about weapons, and eventually purchase a firearm provided him the means and

opportunity to conduct his attack.

After successfully gaining access to the base, Alexis used his security clearance to

gain access to Building 197, while carrying a disassembled shotgun in a shoulder bag. He

assembled the shotgun inside a bathroom and began shooting at 8:16 a.m. Alexis fatally

shot three people instantly and a fourth suffered wounds to the head and hands.[154] A 911

call went out a minute later, but by 8:22, Alexis had killed 10 people in six minutes.

Police arrived at the WNY gate at 8:23, and together with Naval Criminal Investigative

Service agents entered Building 197 where Alexis was shooting at 8:27 followed by

Metropolitan Police Department at 8:34. At 8:38, Alexis shot and killed his 12th victim,

and at 9:14, Alexis shot and injured a Metropolitan Police Department officer. At 9:25,

Alexis tried ambushing responding officers, but was shot and killed in the process.[155]

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[153] Tom Jackman, "Inside Sharpshooters, the Newington gun store where Aaron Alexis bought his shotgun," *The Washington Post*, 18 September 2013, accessed 22 December 2015, https:// www.washingtonpost.com/blogs/local/wp/2013/09/18/inside-sharpshooters-the-newington-gun-store-where-aaron-alexis-bought-his-shotgun/.

[154] Metropolitan Police Department, *After Action Report: Washington Navy Yard, September 16, 2013: Internal Review of the Metropolitan Police Department, Washington, DC* (Washington, DC: Metropolitan Police Department, 11 July 2014), 13.

[155] Ibid., 11.

Reports indicate that at approximately 8:30 a.m., he shot and killed Richard Ridgell, a security officer stationed in the building. Ridgell remained in place at the request of other police officers to prevent the shooter from leaving the building.[156] After taking Ridgell's pistol, at 8:34 a.m., Alexis went towards the west side of the building, and shot and killed a man standing at the corner of an alleyway. Alexis' use of the pistol, vice his original use of the shotgun, confused the police and led them to assume two shooters remained active in the building.[157] These circumstances provide more reinforcement to the characteristic of response delay and indiscriminate targeting, and the multiple weapons pushed this into the second level of complexity. There is no strong evidence to suggest that any victim took aggressive action to the shooter, but executed run and hide strategies.[158]

Aaron Alexis was a 34-year old male who acted alone, and used both a shotgun and a pistol for the killing. His killing spree resulted in 12 people dead, and three more wounded. Building 197 contained mostly civilians and a few military personnel that were all unarmed, indicating a soft target location with the potential for a high victim count. These results align with NYPD's general active shooter profile in terms of age group, sex, type of weapon, and target location. The casualties produced at the WNY were the second most on a U.S. military base behind Fort Hood. The casualty rates, like Fort

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[156] The Washington Post, "What happened inside Building 197?" updated 25 September 2015, accessed 23 December 2015, http://www.washingtonpost.com/wp-srv/special/local/navy-yard-shooting/scene-at-building-197/.

[157] Metropolitan Police Department, *After Action Report: Washington Navy Yard,* 16.

[158] The Washington Post, "What happened inside Building 197?"

Hood, dwarf the average number of killed and wounded in the collective case studies. The fact that Alexis was able to acquire a pistol during the attack added complexity. Finally, most of the casualties took place in the first six minutes and the WNY shooting ended when armed police engaged the threat.

An internal review found the WNY was in general compliance with DoD installation access policies, although random inspections of vehicles were not conducted according to policy. However, it is impossible to determine whether increased random security checks would have led to the discovery of the weapon Alexis carried onto the installation to conduct his attacks.[159] Furthermore, the review team found some DoD components are not compliant with implementing policy requirements for seeking unescorted access to DoD installations.[160] The DoD required vetting personnel against government authoritative data sources including criminal and terrorism checks. However, in certain cases, visitors could show a driver's license and some vendors were granted access without proper background checks.[161] Fixing this potential vulnerability in DoD defenses could prove critical in preventing active shooter attacks of more complexity on military installations like those in France and Kenya.

Chattanooga

On 16 July 2015, 25-year old Kuwait-born Mohammad Youssef Abdulazeez, unleashed a barrage of gunfire from his car at a recruiting center and a U.S. military

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[159] DoD, *Internal Review of Washington Navy Yard Shooting,* 2.

[160] Ibid., 44.

[161] Ibid.

reserve center in Chattanooga killing four Marines and a Sailor before he was shot to death by police. The FBI confirmed Abdulazeez first fired at a military recruiting office on Lee Highway without exiting his convertible, and then made entry to a nearby military facility in Chattanooga by crashing through a gate.[162] After plowing his rented car through the gates, and with Chattanooga police chasing close behind, the gunman got out of the car and stormed into the building. Abdulazeez fired inside the reserve facility, fatally wounding the Navy Sailor, and then exited the building to a fenced-in motor pool, where he shot several Marines. Three to five minutes after the second shooting began; he reentered the building, where he fired upon responding police officers and was fatally wounded by them.[163]

Abdulazeez prepared for a shootout; investigators found one gun in his vehicle, and both an assault rifle and handgun found on his person. Authorities also recovered a vest that could hold extra ammunition. Following the shootings, officials stated that Abdulazeez was carrying an AK-47-style semi-automatic rifle and a 9mm handgun.[164]

[162] TimesFreePress, "FBI explains how Chattanooga shooting played out, how Mohammad Abdulazeez was killed," 22 July 2015, accessed 28 November 2015, http://www.timesfreepress.com/news/local/story/2015/jul/22/live-updates-press-conference-chattanooga-shootings/315906/.

[163] Avianne Tan, "Chattanooga Shooting: FBI Reveals New Details," *ABC News,* 22 July 2015, accessed 18 January 2016, http://abcnews.go.com/US/chattanooga-shooting-fbi-reveals-details/story?id=32619426.

[164] Erin McClam and Pete Williams, "Chattanooga Shooting: Attacker Had At Least Three Guns, Authorities Say," *NBC News*, 17 July 2015, accessed 22 January 2016, http://www.nbcnews.com/storyline/chattanooga-shooting/chattanooga-shooting-attacker-had-least-three-guns-authorities-say-n394046.

Police seized yet another semi-automatic rifle at Abdulazeez's home,[165] and friends of

Abdulazeez told LE that he recently began firing his rifles and other weapons at a local

range.[166] Abdulazeez appeared to have made some detailed preparations prior to his

attack.

Investigators recovered two guns belonging to service members at the scene,

including shots fired from at least one, but authorities have yet to report whether

Abdulazeez was impacted from those rounds.[167] At a news conference, the FBI

confirmed that at least one service member shot at the attacker, but did not say whether

he had managed to wound the gunman killed minutes later in a shootout with the

Chattanooga police. "A service member from inside the facility observed him and opened

fire on him, firing several rounds at him," said Edward W. Reinhold, the special agent in

charge of the FBI's Knoxville office.

According to an LE official who briefed the investigation into the killings, a few

servicemen fatally wounded that day, sacrificed themselves during the assault, and

diverted the gunman from a larger group of potential victims.[168] In addition to the

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[165] Greg Botelho, Ralph Ellis, and Victor Blackwell, "4 guns seized after Chattanooga shooting, official says," *CNN*, 18 July 2015, accessed 18 January 2016, http://www.cnn.com/2015/07/17/us/tennessee-naval-reserve-shooting/.

[166] CBS News, "Chattanooga gunman talked of frequenting shooting range," last updated 18 July 2015, accessed 18 January 2016, http://www.cbsnews.com/news/chattanooga-shooting-gunman-muhammad-youssef-abdulazeez-gun-range/.

[167] TimesFreePress, "FBI explains how Chattanooga shooting played out."

[168] Richard Fausset, Richard Perez-Pena, and Matt Apuzzo, "Slain Troops in Chattanooga Saved Lives Before Giving Their Own," *The New York Times*, 22 July 2015, accessed 5 March 2016, http://www.nytimes.com/2015/07/23/us/chattanooga-tennessee-shooting-investigation-mohammod-abdulazeez.html.

aforementioned weapons, investigators discovered a 9mm Glock handgun privately

owned by one of the slain Marines used during the shooting. The reserve center's

commanding officer disclosed that he discharged a personal firearm against

Abdulazeez.[169] These actions reinforce the characteristic of victim response including

actions to fight the attacker.

Unlike Major Hasan, Abdulazeez did not attract the attention of the FBI in the

period leading up to the shootings.[170] Allegedly, Abdulazeez traveled to Jordan five times

between 2003 and 2014, with his last visit arranged by family to get him away from

negative influences, and he also traveled to Kuwait in 2008.[171] Only after searching his

computer following the shooting did authorities find CDs and downloaded videos by al-

Qaeda.[172] Although an FBI spokesman stated that Abdulazeez had some radical thoughts,

none of his writings indicated imminent attack or motive.[173] The motivation surfaced

[169] Awr Hawkins, "Navy Commander Confirms he Fired at Mohammad Abdulazeez with his 'Personal Weapon'," *Breitbart,* 31 July 2015, accessed 15 April 2016, http://www.breitbart.com/big-government/2015/07/31/navy-commander-confirms-he-fired-at-mohammad-abdulazeez-with-his-personal-weapon/.

[170] Fox News, "Gunman identified in shooting deaths of 4 Marines at Tennessee Navy facility," 17 July 2015, accessed 18 January 2016, http://www.foxnews.com/us/2015/07/17/shooting-reported-at-chattanooga-army-recruiting-center-college-on-lockdown.html.

[171] Scott Zamost et al., "Chattanooga shooting: New details emerge about the gunman," *CNN*, 20 July 2015, accessed 18 January 2016, http://www.cnn.com/2015/07/20/us/tennessee-naval-reserve-shooting/.

[172] Jonathan Dienst and Miguel Almaguer, "Mohammad Youssef Abdulazeez Downloaded Recordings From Radical Cleric, Officials Say," *NBC News*, 21 July 2015, accessed 22 January 2016, http://www.nbcnews.com/storyline/chattanooga-shooting/mohammad-youssef-abdulazeez-downloaded-recordings-radical-cleric-officials-say-n395986.

after the attack from the fact that on 11 July, Abdulazeez bought ammunition, and on 13 July, he wrote long diary entries describing life as a prison and that one should submit to Allah before it is too late.[174] Only hours before the shooting, he may have texted an Islamic verse to a friend declaring war against those who show hatred to friends.[175]

Abdulazeez was also abusing sleeping pills, drugs, and alcohol according to family; and was in debt and planning to declare bankruptcy.[176] Abdulazeez began receiving therapy for his drug and alcohol abuse,[177] he received treatment for depression,[178] and according to a CNN source Abdulazeez was suffering from bipolar

[173] Jay Reeves, "Chattanooga gunman wrote of suicide and martyrdom," Boston Globe, 21 July 2015, accessed 18 January 2016, https://www.bostonglobe.com/news/nation/2015/07/20/chattanooga-gunman-wrote-suicide-and-martyrdom/hXNPzjqJo3z2nX9vzlVpUJ/story.html.

[174] Joan G. McClane and Joy L. Smith, "Why he did it: a look at the Chattanooga gunman's motives," *Chattanooga Times Free Press*, 21 July 2015, accessed 15 January 2016, http://www.timesfreepress.com/news/local/story/2015/jul/21/abdulazeez-lived-two-lives/315648/.

[175] Rich McKay, "Suspected Gunman Blogged About Islam Before Tennessee Shootings: Report," *Reuters*, 16 July 2015, accessed 18 January 2016, http://www.reuters.com/article/us-usa-shooting-tennessee-suspect-idUSKCN0PQ2RO20150716.

[176] Brian Ross, Doug Lantz, and James Gordon Meek, "Chattanooga shooting: FBI recovers gunman's disturbing diary," *12 News*, 20 July 2015, accessed 18 January, 2016, http://www.12newsnow.com/story/29585894/x.

[177] Richard Valdmanis, "Tennessee suspect texted friend link to Islamic verse before attack," *Reuters*, 18 July 2015, accessed 18 January 2016, http://www.reuters.com/article/us-usa-tennessee-shooting-idUSKCN0PS0H120150718.

[178] Greg Jaffe, Cari Wade Gervin, and Thomas Gibbons-Neff, "Tenn. gunman used drugs, struggled with clash of faith," *The Washington Post*, 18 July 2015, accessed 18 January 2016, https://www.washingtonpost.com/politics/chattanooga-shooter-an-aimless-young-man-who-smoked-dope-and-shot-guns/2015/07/18/c213f6a6-2d7d-11e5-a5ea-cf74396e59ec_story.html.

disorder.[179] The human judgment characteristic is more vague in this circumstance and Abdulazeez's radicalization appears more discrete than others do. However, had all the details emerged about Abdulazeez's travels, his history of medical problems, fiscal problems, and his DUI charge compiled may have triggered a more aggressive response. Regardless, Abdulazeez possessed warning signs that eluded family members and LE personnel.

Abdulazeez, a 25-year old male who acted alone, used an assault rifle for the killing. At the conclusion of the attack, he fatally shot five servicemen and wounded two others.[180] The recruiting center and reserve center had unarmed military working there, indicating another soft target location with the potential for a high victim count. These results align with NYPD's general active shooter profile in terms of gender and target location, but not age group. Although the casualty rates were not as high as Fort Hood or WNY, they remain higher than the average number of killed and wounded in the collective case studies. Even though he acted alone, Abdulazeez used an assault weapon and fired in more than one location, signifying a greater level of attack complexity. Although the exact timeline is still under investigation, from media reports and FBI comments it can be reasonably deduced that most casualties occurred in the reserve center's motor pool in a short span of time. Finally, the shooting only ended when armed police engaged the threat.

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[179] Zamost et al.

[180] Times Free Press, "Four misconceptions about the Chattanooga shooting," 23 July 2015, accessed 25 April 2016, http://www.timesfreepress.com/news/local/story/2015/jul/23/four-misconceptions-about-chattanooga-shooting/316173/.

On 16 December 2015, FBI Director James Comey said that the FBI investigation had concluded that "there is no doubt that Abdulazeez was inspired, motivated by foreign terrorist organization propaganda," although difficult to determine the group. Comey further stated that as the United States has become more effective at preventing complex attacks like 9/11, the terrorists have turned to less-complicated attacks such as mass shootings.[181] This analysis further reinforces the significant threat of HVE with firearms attacks that seem to be increasing in the United States.

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[181] Kristina Sgueglia, "Chattanooga shootings 'inspired' by terrorists, FBI chief says," *CNN,* 16 December 2015, accessed 16 December 2015, http://www.cnn.com/2015/12/16/us/chattanooga-shooting-terrorist-inspiration.

Table 1.   Characteristic Summary

Criteria	Fort Hood	WNY	Chattanooga
Human Judgment	Yes: email with terrorist leaders, personality issues	Yes: history of arrests, visits to hospital, open mental issues	Yes: history of medical issues, trouble with law, and Middle East visits
Shooter Preparation	Yes: well prepared, soft target, range training	Yes: knew the building, access to weapons, soft target	Yes: assault weapon, weapons training
Response Time (Delay)	Yes: 3 minute delay from 911 call to first responder	Yes: five minute delay from 911 call to first responder	Yes. 3 to 5 minute delay from shots fired call
Victim Response	Yes: At least three attempted to disarm	Yes: run and hide methodology	Yes: at least one unauthorized weapon fired
Indiscriminate Targeting	Yes: except let some civilians go, no prior relationship	Yes: 12 civilians, no prior relationship	Yes: no connection with victims, random shooting at two different locations
NYPD Shooter Profile	Male: Yes Alone: Yes Age: Yes	Male: Yes Alone: Yes Age: No, close at age 34	Male: Yes Alone: Yes Age: No
Casualties	13 killed, 43 wounded	12 killed, five wounded	Five killed, two wounded
Time Sensitive	10 killed or wounded per minute in first four minutes	10 killed in first six minutes.	Five killed within five minutes.
Target Location	Soft Target: no armed guards.	Soft target: civilians secure area; although armed guard on duty at entrance	Soft target: unarmed recruiting center and unarmed reserve center
Complexity	Level 1: One shooter, pistol, one location	Level 2: One shooter, shotgun and pistol, one location, but moved around	Level 2: multiple locations, assault weapon, one shooter
Termination	Armed LE	Armed LE	Armed LE

Source: Created by author.

<u>Active Shooter Defeat Methodology</u>

Recent active shooter study continues to force domestic organizations to adapt new strategies to deter, mitigate, and/or defeat the active shooter. DoD has numerous policy documents that bear on the active shooter threat including physical security, workplace violence, insider threat, AT, installation emergency management, and others. Each of the services continues to find innovative methods and develop internal policies to protect their respective installations. There is also a plethora of federal and civilian agencies providing training and protocols, like the DHS and the Advanced Law Enforcement Rapid Response Training, offering modern techniques to counter the threat. DoD policy, service-specific approaches, and other best practices provide building blocks for a security-in-depth model. From planning, through execution, and post-event, the model provides a snapshot of potential vulnerabilities to active shooters, and where augmented security might be beneficial in strengthening the approach to counter threat.

Department of the Army Doctrinal Publication 3-37, *Army Protection,* describes protection as the "preservation of mission-related military and non-military personnel, equipment, facilities, information, and infrastructure deployed or located within the boundaries of a given operational area."[182] Protection preserves the combat power potential of the force by providing capabilities to identify and prevent threats and hazards and to mitigate their effects. This occurs through integrated, reinforcing, complementary, and flexible capabilities across the range of military operations. The commander's

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[182] Headquarters, Department of the Army (HQDA), Army Doctrine Publication (ADP) 3-37, *Army Protection* (Washington, DC: Government Printing Office, August 2012), 1.

responsibility to protect and preserve the force is critical in gaining, sustaining, and exploiting the initiative.[183]

Protection principles provide context for implementing measures, developing schemes, and allocating resources. The Army has five pillars of protection and they are comprehensive, integrated, layered, redundant, and enduring. Comprehensive means all-inclusive utilization of tasks and systems available to preserve the force. Integration is simply integration with other activities, systems, efforts, and capabilities to provide strength and structure. The principal of layered focuses on providing strength and depth, and it reduces the threat in piece meal resulting in culmination. Redundancy ensures that specific activities or systems that are critical for success have a secondary or auxiliary effort to prevent failure. Finally, enduring simply implies protection capabilities that are ongoing and maintaining the objectives in preserving combat power.[184] However, protection principles, to include passive and active measures, only produce positive results with proper planning, direction, oversight, and accurate reporting. The DoD policy on CbT provides the framework to counter violent acts like active shooters.

DoD Instruction 2000.12 describes CbT as encompassing all actions taken to oppose terrorism throughout the entire threat spectrum. Actions taken include AT, counterterrorism, terrorism consequence management, and intelligence support.[185] In support of the larger CbT effort, DoD's Instruction 2000.16 further describes terrorism vulnerability assessments as an approach to determine the full range of terrorist threats

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[183] HQDA, ADP 3-37, 1.

[184] Ibid., 2.

[185] Acting Undersecretary of Defense for Policy, DoD Instruction 2000.12, 29.

against identified potential targets of the DoD. It identifies areas of improvement to withstand, mitigate, or deter acts of violence or terrorism. This process provides a basis for determining AT measures that can protect personnel and assets from identified vulnerabilities to terrorist attacks.[186] The AT program is focused on prevention, detection, and defensive preparation of DoD assets against terrorist attacks.

The minimum elements of an AT program are AT risk management, planning, training and exercises, resource application, and program review. AT risk management identifies and manages risks arising from the current operating environment with the end result of determining areas and assets that are vulnerable to the threat means. Based upon the threat, criticality, and vulnerability assessments, the commander must determine the risk cost versus mission benefit to deter, mitigate, and defeat the threat. This is especially difficult considering the current fiscally constrained environment. AT planning is the process of developing specific guidance for the establishment of an AT program and standard implementation. AT training and exercises consist of developing individual, leader, and collective skills, and the conduct of comprehensive exercises to validate plans for AT. AT resource application is the process of applying risk management to vulnerabilities, and ensuring sufficient life-cycle costs of AT programs.[187] As previously mentioned in chapter 1, the DoD's physical security programs provide a security-in-depth approach and system components supplement the CbT effort , including AT measures, that support active shooter defeat.

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[186] Principal Deputy Undersecretary of Defense for Policy, DoD Instruction 2000.16, 11.

[187] Ibid., 7-8.

Security-in-depth is a determination by the senior agency official that a facility's security program consists of layered and complimentary security controls sufficient to deter, detect, and document unauthorized entry and movement within the facility. A threat analysis accounts for all available information concerning the capability, activity, and intention of threats, which supports the countermeasures required to engage and defeat the threat. Based on the threat assessment, DoD units determine if there is a vulnerability, which left unchanged, may result in loss of life. The final vulnerability assessment is a comprehensive evaluation of an installation, facility, or activity to determine preparedness to deter, withstand, and /or recover from the full range of adversarial capabilities.[188]

Each security system component (examples provided in chapter 1) possesses one or more of the following functions within the collective security-in-depth approach. First is to detect, identify, track, and alert security personnel of potential threat. Second is to assess the size, disposition, and composition of the potential threat through a variety of means. Third is to use secure and diverse command, control, and communications to prevent and contain the threat. Fourth is to delay the threat using a combination of passive and active measures. Last is to respond providing the use of properly manned, trained, and equipped security personnel to mitigate and defeat the threat.[189]

The DoD Post Commission provides quality assurance of DoD LE by establishing and maintaining a collection of standards. Standards involve the process of selection, training, and employment of LE assets to include compliance processes. The commission

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[188] Undersecretary of Defense for Intelligence, DoD, 5200.08-R, 8-9.

[189] Ibid., 14.

also serves as the center for analyzing and disseminating best practices on LE selection, training, management, leadership, and other relevant LE topics.[190] DoD standards and training related to active shooter mitigation involve response to active shooter events.[191] Comprehensive research indicates that the DoD sets LE enforcement standards across a broad range of operational capabilities; however, currently each service is granted the latitude to train and develop their active shooter programs. When LE and MP presence and overt exercises fail to prevent ASEs, the last line of defense may be the buddy system; when a teammate reports suspicious activity of another.

In Department of the Army Field Manual 3-21.75, *The Warrior Ethos and Soldier Combat Skills,* every soldier is a sensor that provides useful information and is critical to achieving situational understanding. The critical necessity comes from characterization of the operational environment as violent, friction-induced, uncertain, and complex; thus making every set of eyeballs a critical necessity. The 'Every Soldier is a Sensor' concept ensures that Soldiers train to actively observe for details in pursuit of the Commander's Critical Information Requirements (CCIR) while in an AO. It is then the responsibility of leaders to gather this information and synthesize it into actionable intelligence for the Commanding Officer, and disseminate across the force.[192] The DoD's insider threat and workplace violence programs direct the services to conduct training on potential indicators and reporting procedures that directly support active shooter prevention.

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[190] Ibid., 8.

[191] Ibid., 20.

[192] Headquarters, Department of the Army, Field Manual 3-21.75, *The Warrior Ethos and Soldier Combat Skills* (Washington, DC: Government Printing Office, January 2008), 9-1.

DoD policy requires the force to implement the National Insider Threat Policy and Minimum Standards for Executive Branch Insider Threat Programs. DoD components should gather, analyze, synthesize, and respond to information across multiple domains and agencies to deter, counter, and mitigate active shooters that include: counter-intelligence, cyber-security efforts, personnel management, workplace violence, mental health, AT risk management, LE, monitoring of DoD information networks, and other sources and security efforts. These sources provide commanders an integrated capability to monitor and audit information for insider threat detection and mitigation.[193] DoD policy also provides guidance on workplace violence procedures and training efforts to discourage personnel from engaging in workplace violence or threats, and to promptly report acts or threats of violence to supervisors.[194] These two programs provide the backbone for training and DoD component standard operating procedures that reinforce the security-in-depth model by adding another layer of obstacles for active shooters to navigate.

The Every Soldier a Sensor concept intends to expose potentially negative behavior at the lowest level, but carries limitations that need to be addressed regularly. The military is an environment built on trust and loyalty often through shared adversity. Service men and women are trained on reporting and workplace violence behaviors; however, many of them may not report suspicious behavior for a variety of reasons to include getting their battle buddy in trouble or risk being wrong in reporting. The recent

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[193] Deputy Secretary of Defense, DoD Directive 5205.16, 2.

[194] Acting Under Secretary of Defense for Personnel and Readiness, Department of Defense Instruction 1438.06, *DoD Workplace Violence Prevention and Response Policy* (Washington, DC: Department of Defense, January 2014), 1.

rise of active shooters and freedom of movement for insider threats make the Every

Soldier a Sensor program even more critical and command climates should allow for this

type of reporting without retribution. In the end, should the CbT, AT, physical security,

and entire security-in-depth apparatus fail to prevent an ASE, the DoD directs the force to

implement emergency management procedures to terminate the threat as quickly as

possible and mitigate overall damage.

By 2014, each DoD installation was supposed to be fully operationally capable of

providing installation emergency management per DoD Instruction 6055.17. A

significant aspect of the installation emergency management plan was the development

and maintenance of an Emergency Operations Center (EOC) where the coordination of

information and resources to support the incident commander occur. The intent was to

relieve external support burdens and better coordinate with the whole community effort.

EOCs maintain a common operating picture and information management scheme to

ensure interoperability, continuous warning, and proper notification. Mass notification

involves a combination of voice, visible signals, text messaging, or email.[195] Installation

emergency management is exercised annually, and could coincide with other exercises

like active shooter drills.[196] This approach provides significant advantages to ASE

mitigation and recovery, but may contribute very little in reducing casualties during the

spontaneous and aggressive nature of ASEs.

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[195] Acting Undersecretary of Defense for Personnel and Readiness, Department of Defense Instruction 5525.15, *Law Enforcement (LE) Standards and Training in the DoD* (Washington, DC: Department of Defense, 27 April 2012), 37-38.

[196] Ibid., 32.

The following list summarizes the security-in-depth approach to deterring and defeating ASEs as necessary discussed in this chapter and throughout the paper. The list is based on approaches and resources that most DoD installations have at their disposal. This list includes the additional augmented security asset and its placement within the security-in-depth model.

Prior to an ASE:

1. Engaged leadership

2. Protection principles

3. Force Protection conditions and CbT strategy

4. AT planning and risk management

5. Vehicle Search (random searches of vehicles)

6. Military Access (must provide proper identification)

7. Active shooter training and Level 1 AT training

8. Local community integration and information sharing

9. FBI information flow

10. Mental Health information flow

11. Military installation training and exercises

12. Deterrence through overt interior guard presence

13. Deterrence through overt/covert LE and MP presence

14. Services could implement augmented security if the mission and threat warrants implementation

15. Every individual a sensor includes insider threat and workplace violence indicators

During an ASE:

1. Victim Response (Run, Hide, Fight)

2. Civilian LE and MP response

3. Includes augmented security if approved

4. Installation Emergency Management system

5. Mass Notification tools

The Air Force appears to be taking the initiative within DoD in establishing a full-time augmented security force to further enhance active shooter deterrence and mitigation. The Air Force UMP concept suggests that the current model of active shooter mitigation in the DoD is primarily achieved through awareness training and first responder actions. Their analysis is similar to statistics mentioned above in that most ASEs last 12 minutes or less with 37 percent lasting five minutes or less. Another issue as described above and echoed in the Air Force UMP is that LE plays a part in ASEs just shy of 60 percent of the time. The UMP CONOP suggests that individual actions are critical to survival. UMs provide deterrence, facilitate run and hide tactics, and greatly limit the ability of the active shooter. UMs also provide the commander with an additional resource in overcoming shortfalls to active shooter response by having trained and armed personnel at vulnerable or critical sites.[197]

The UMP is the selective arming of designated and trained personnel (UMs) for immediate defense against active shooters in the workplace. Installation commanders deploy UMPs with consideration to in-place security measures, boundary security, access

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[197] Headquarters Air Force Security Forces, *Combating Active Shooter: UMP CONOP*, 3.

control, population density, customer service functions, LE response times, and facility purpose and layout.[198] The UMP is a squadron-executed program reporting its activities to the Defense Force Commander and associated security force UMP manager. Commanders and staff reassess UMP programs annually, or when the installation performs the risk management process.[199] Given the current operating environment and the active shooter characteristics mentioned previously, the UMP appears to be a good first step towards an appropriate security solution.

Conclusion

Terrorist organizations like ISIS and Al Qaeda will remain a credible threat to the United States through safe havens overseas and access to radicalization through the Internet. In his testimony to Congress, Commander of U.S. Northern Command Admiral William E. Gortney, determined that the nature of this current threat warranted the implementation of FP condition Bravo; only the second implementation within the United States since 9/11. With the rise of the information age and the proliferation of assault weapons, it would probably suit the DoD better to take a "When this happens" over "If this happens" mindset. Analysis of DoD ASE characteristics demonstrates that the military is not immune to attacks and they have characteristics similar to ASEs outside DoD installations; with the exception that casualties appear to be much higher. Fortunately, DoD doctrine and policy already places emphasis on the credible threat by

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[198] Ibid., 3.

[199] Ibid., 4.

employing a security-in-depth approach; the DoD may need to explore options to sharpen

its teeth like having more armed members in the ranks.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

DoD Components and DoD elements and personnel shall be protected from terrorist acts through a high-priority, comprehensive AT program using an integrated systems approach.

— Acting Undersecretary of Defense for Policy, Department of Defense Instruction 2000.12

Introduction

The preceding chapter analyzed the threat, active shooter trends, and active shooter defeat or mitigation techniques. The intent of this chapter is to summarize the research findings, discuss recommendations, and identify areas for further research. The DoD has given the services the ability to arm additional personnel to augment LE and MP on installations; however, each of the services has implemented this guidance in their own way. The Air Force is leading the most aggressive approach in this arena through the UMP. The UMP idea provides the foundation for further recommendations to ensure the best possible outcomes of victim initiated responses to ASEs across the DoD.

The Joint Operations Planning Process answers the questions of feasibility, adequacy, acceptability, distinguishability, and completeness to ensure that courses of action meet or exceed validity testing. The planning staff must answer the following questions: (1) is it feasible or can it accomplish the mission within the commander's guidance; (2) is it adequate or can it be accomplished within the commander's guidance; (3) is it acceptable or does it balance cost and risk with the advantage gained; and (4) is it distinguishable or does the course of action differ from other potential courses of action?

Is it complete or does it answer the who, what, where, when, why, and how? [200] In addition, any solutions that emerge must defeat both the enemy's most likely and most dangerous courses of action. The following chapter will bear this criterion in mind while basing recommendations on research findings or providing context for potential branch plans.

<div align="center">Research Findings</div>

When a young man or woman joins the police department they understand the inherent risk, but are also assured they have the means to protect themselves on and off duty. Throughout this research there was no discovery of active shooter attacks within or directed at police stations; they are hard targets. The military, on the other hand, is not a LE agency. They are not involved in regular duties that put them into harm's way while stationed at home base. However, this research demonstrates that attacks on military installations have occurred in the past and there are credible threats of future attacks. The military must implement mitigation platforms and procedures to successfully deter and quickly defeat this threat. The DoD needs to get "left of bang" now, train to standard, and ensure effectiveness of these emerging solutions. Warriors are not paid for daily business, but for preparation of action taken during crisis to bring about effective resolution; the DoD gets paid to win wars.[201] Whatever that training approach and strategy looks like, it must be fundable, sustainable, and executable.

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[200] Joint Chiefs of Staff, Joint Publication 5-50, *Joint Operations Planning Process* (Washington, DC: Government Printing Office, 11 August 2011), IV-25.

[201] Blair et al., 78.

Following the attacks at the WNY, an internal review board recommended a

physical security approach that employs defense-in-depth using technology and

manpower.[202] The internal review board also discovered that the perpetrator obtained a

security clearance, was a trusted insider, had telegraphed personal dissatisfaction and

exhibited aberrant behavior, and had legitimate access to the facility to commit the

offense.[203] The 2012 Defense Science Board results also revealed that perpetrators often

engage in planning and preparation steps that are detectable and allow for intervention

before an ASE occurs.[204] The biggest advantage to gain for friendly forces is applying

sound judgment in detecting and intervening during an attacker's planning stage. As a

last resort, if the active shooter can commence the attack undetected, the perpetrator

should be defeated, mitigated, stalled, or distracted by well-dispersed and vigilant regular

and augmented security forces. Augmented security may be the only way to deter and/or

quickly defeat active shooters based on the characteristics of ASEs.

Based on analysis in chapter 4 it appears that evidence from military case studies

further reinforce the common characteristics found in the *Defeating the Active Shooter*

study. Human error in judgment, response delay, victim response, and indiscriminate

killing were inclusive in all case studies in varying degrees. This study also provided

information to argue that each case contained the additional characteristics except for the

ages of Aaron Alexis and Mohammad Abdulazeez. Each of the case studies met

termination criteria through an armed police response. Although the WNY incident took

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[202] DoD, *Internal Review of the Washington Navy Yard Shooting*, 4.

[203] Ibid., 17.

[204] Ibid.

more than an hour to terminate, this ASE and those from Fort Hood and Chattanooga

provide evidence of highest casualties during the first few minutes of an ASE;

demonstrating the time-sensitive nature characteristic. The complexity of Fort Hood was

assessed at level one while the shootings at Chattanooga and WNY were argued for level

two because of multiple locations/weapons, and use of semi-automatic weapons. Finally,

and maybe most concerning, are the higher casualty rates during ASEs on DoD

installations, with each case study exceeding the average rate of kill/casualty of ASEs

studied since 2000.

Where do we go from here? An agent/computer based modeling test, conducted at

Purdue University, demonstrated that arming resource officers and teachers at schools

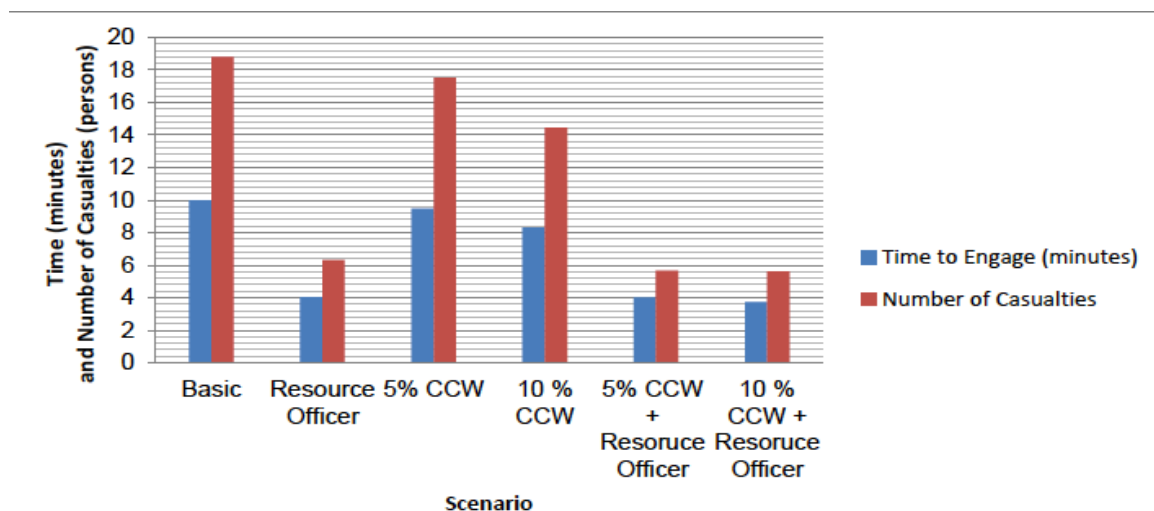could drastically reduce response time and casualties.

Figure 1.   Compiled Results from the AnyLogic Modeling

Source: Charles Anklam, Adam Kirby, Filipo Sharevski, and Dr. J. Eric Dietz,
"Mitigating Active Shooter Impact; Analysis for Policy Options Based on
Agent/Computer Based Modeling," *Journal of Emergency Management* (March 2014):
24.

Having a resource officer on duty reduced casualties by 66.4% and response time by 59.5%. Having 5% of personnel carry a concealed weapon reduced casualties by 6.8% and response time by 5.4%. Increasing the percentage of personnel with concealed carry to 10% reduced casualties by a total of 23.2% and response time by 16.8%. Combining 5% concealed carry personnel with a resource officer reduced casualties by 69.9% and response time by 59.7%. The final and most successful scenario of 10% concealed carry personnel with a resource officer reduced casualties by 70.2% and response time by 62.7%.[205]

The AnyLogic method in this case oriented on a closed system school environment and requires adjusted inputs to gain insights for a multi-facility and dispersed military installation; moreover, the AnyLogic program remains a costly platform. However, just like the study above, reducing soft target locations and response times with responsible implementation of augmented security is likely to have the same effects. The threat of immediate retaliation forces active shooters to spend increased time and focused efforts in reconnaissance and planning. Active shooters would also be more reluctant to enter other rooms or locations for fear of increased personnel with weapons. The nations of the world do not exist in perfect peace or total war; battles erupt in efforts to gain the best security situation as possible, even though that security posture is really just the best insecurity situation available. Units can neither defend everywhere nor fight everywhere. Leaders have to prioritize efforts based on the current operating environment and hope that when friction emerges, the environment is shaped well-enough to allow mitigation of the threat quickly.

With this information in mind, it is neither feasible, adequate, nor acceptable to eliminate the presence of authorized or unauthorized weapons on base altogether, nor to arm every single citizen and serviceman that works on a military installation. De-arming

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[205] Anklam et al., 11.

will certainly create softer targets and invite more attacks that will end in increased lethality. Arming everyone involves the cost of purchasing extra weapons, arms room, conducting training, clearance procedures, and armory access and leading to both significant financial expenditures and increased cost through deaths by way of negligent discharges and the application of poor judgment by armed personnel.

Arthur F. Lykke Jr. developed a strategic framework consisting of ends, ways, and means that he likened to a three-legged stool. A balanced strategy or stool, is less prone to collapse and the strategy is less risky, when the ends, ways, and means are in agreement, or the stool legs are the same length as possible. If one of the stool legs are too short or long then the ends, ways, or means have to be adjusted to mitigate risk and bring the stool back into balance.[206] Using risk assessments like the "Lykke model," arming everyone on post could have adverse effects on our national security strategy vital interest number one; protection of our nation's citizens. Too much increase in means (handguns) and in ways (immediate access to lethal action), especially in a stressful military environment, negatively influences the overall goal or end state of force preservation. In essence, the proper way to balance the Lykke model and mitigate risk is to place an adequate and controllable number of cover fire in the unit, like economy of force. This will ensure protection of the unit at danger areas, chokepoints, and other disadvantaged areas.

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[206] Colonel Dale C. Eikmeier, "A Logical Method for Center-Of-Gravity Analysis," *Military Review* (September-October 2007): 63, accessed 5 May 2016, http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20071031_art009.pdf.

So why go through the extra trouble when most DoD installations are defended by obstacles, are closely monitored, contain armed MPs and LE personnel, and there have been only three major attacks successfully executed in the last seven years? The United States has yet to experience the scope and complexity of active shooter attacks like Mumbai and Paris. Multiple shooters in multiple locations will no doubt add great complexity to responding effectively; especially if assault weapons are involved.

Take, for example, an instance where 1,200 people could crowd into an auditorium, and three armed assailants with assault rifles and thirty-round magazines begin firing in coordination while simultaneously blocking the exits. Casualties could reach the hundreds in minutes. If there was even more complexity added and the attackers had other shooters posted along exit routes, it is not unrealistic that casualties could easily reach 300 or more. Events that take place in large auditoriums throughout DoD installations could have additional security measures put in place by the entrance security guards and increased LE and MPs. However, the regular occurrence of briefings in these types of locations and potentially others across the base simultaneously, could exceed assets available. A trained, augmented security force would give other security personnel responsible to protect such events the additional assets needed to effectively deter and quickly mitigate these potential threats on an enduring basis.

<u>Recommendations</u>

The following recommendations follow the force development model and the capabilities based assessment to determine a need or shortfall. The model includes the doctrine, organization, training, material, leadership, personnel, facilities, and policy

domains (DOTMLPF-P).[207] This study concludes that augmented security should be

required in some variation by DoD across the force. This augmentation requirement has

implications across each force development domain below. The Air Force has conducted

considerable research in this area, and the UMP concept was used to establish many

baseline recommendations across the DOTMLPF-P domain, and additional comments

were added to reinforce or enhance that augmentation program to meet the active shooter

threat. Although a specific recommendation for augmentation would be beneficial, there

is no "one size fits all" approach for security; each installation deserves analysis and local

approaches. Therefore, specific augmentation methods are outside the scope of this paper,

but a variety of roughly framed solutions is discussed below in research

recommendations.

<div align="center">Doctrine</div>

The DoD and the services have a robust security-in-depth program in place to

deter, prevent, and defeat attacks on DoD installations. Current doctrine does a good job

of addressing the active shooter threat whether in workplace violence documents, FP

manuals, AT publications, etc. Standard operating procedures provided by the DHS

remain contemporary and the best approach for actions taken by unarmed victims. The

one thing that doctrine needs to reinforce is the necessity of installations to ensure

sufficient guardian angel coverage in the garrison environment; a technique that has

proven so effective in counterinsurgency operations. Bases should implement augmented

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[207] ACPnotes, "JCIDS Process: DOTMLPF-P Analysis," 2015, accessed 5 May 2016, http://www.acqnotes.com/acqnote/acquisitions/dotmlpf-analysis.

security in an effectively distributed manner, which provides deterrence and prevention of ASEs throughout the base on a daily basis.

Organization

In order to ensure accountability and gain the maximum efficiency from augmented security a 24-hour base operations center is required. This base operations center could coordinate, plan, issue guidance, and properly execute security protocol in support of daily business and especially critical events. Augmented security need to report in for a daily brief before arming; primarily in person or via phone, email, or text. High occupancy, soft target areas should have regular security patrols during peak business hours. Units on installation should fill their own augmented security needs and command and control requirements; however, units also need the ability to call and request additional assets for identified shortfalls. The operations center, likely manned by the military police or the G-3, should also be the location of the EOC.

Training

The authors of *Active Shooter Events and Response* suggest that complex tactics relying on strong teams that train often, and honed skills through strict regimes are ineffective methodologies for the active shooter response.[208] Due to limited training time and resources, tactics would require proficiency in a short timeframe. This drives a curriculum focused on conceptual and principle based training that is easy to recall under stress vice very detailed deliberate action.[209] Active shooter response generally requires

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[208] Blair et al., 14.

[209] Ibid., 15.

dynamic, aggressive, and decisive action by members coming together who may never have worked together before, or only for a limited amount of time.[210] Additional requirements suggested by the Air Force UMP CONOP include use of force training, communication and coordination training, weapons qualification training, and medical training.[211] Augmented security should also conduct shoot and no shoot drills in conjunction with ethical decision-making.

<div align="center">Material</div>

DoD installations will require extra material to ensure effective implementation of additional arming. Members involved in this duty need additional gear normally associated with armed guards such as pistols, magazines, and holsters. Those individuals involved in augmented security should also receive the most current bulletproof vests to increase confidence and survival. The DoD must consider the extra ammunition requirements for training augmented security and associated costs. Coordination and implementation of augmented security requires more robust communication assets, to include gear for enhanced operations centers, to ensure proper accountability and command and control. Finally, and possibly most important, will be the requirement to procure the necessary equipment in order to distinguish armed personnel from the active shooter threat. The safest method is some form of 'government access only' technology issued to augmented security before duty and returned upon completion each day. This

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[210] Blair et al., 16.

[211] Headquarters Air Force Security Forces, *Combating Active Shooter: UMP CONOP*, 6.

may cost the government time and money, but the cost benefit in the end translates to saved lives.

Leadership

The additional arming of personnel will require increased leadership and supervision. Commanders and enlisted leadership should be educated on the suitability to bear arms and oversee appropriate accountability actions.[212] Under Air Force UMP, managers also regularly assess an individual's suitability to continue the program, and vet potential UM personnel against the National Crime Information Center and Security Forces Management Information System databases for Lautenberg Amendment criteria or other disqualifying criminal history.[213] Base commanders down to the junior non-commissioned officers (NCOs) should be aware of the additional arming requirements of the base and their specific units and ensure accountability and efficiency of the program. Leaders need to ensure accountability, maintenance, and execution of the program during all planning cycles, training plans, field exercises, and other operations. Unit leaders and planning teams should account for security over-watch of large events susceptible to mass casualties within their training cycles.

Personnel

Personnel involved in the security augmentation program should require additional screening and background checks. Unit leadership should be very deliberate in

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[212] Headquarters Air Force Security Forces, *Combating Active Shooter: UMP CONOP*, 5.

[213] Ibid., 6.

identifying and selecting augmented security to include behavioral assessments;

especially as assessed by peers within the unit. The same type of personality and

behavioral tests used by LE and MPs should be required for this program. It may be

possible and wiser to only use NCOs or above for this duty; like you typically see in

traditional Interior Guard roles. Interior Guard differentiates from other types of guards

such as riot control, tactical area defense, or augmented security in response to a terrorist

threat; and is specifically designed to preserve order, protect property, and enforce

regulations.[214] Interior Guard usually consists of an armed officer and NCO at the

battalion and higher level that are experienced and familiar with unit standard operating

procedures. Using NCOs or junior officers as augmented security personnel would

reinforce the role of leader and protector. Leaders at all levels should view their roles as

sheepdogs and protectors of the sheep, i.e., like a father and son relationship,

responsibility for safety and protection. This type of leadership, responsibility, and

oversight fits nicely with one of DoD's top military priorities concerning force

preservation programs.

<div align="center">Facility</div>

In order to effectively implement the additional arming of personnel the DoD will

have to fund the building of additional and modern training facilities that allow the

regular proficiency of security forces and armed personnel. Development and

construction of shoot houses configured to local building layouts would increase

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[214] Deputy Commandant for Plans, Policies and Operations, Marine Corps Order 5530.15, *U.S. Marine Corps Interior Guard Manual* (Washington, DC: Government Printing Office, October 2008), 1-1.

proficiency, confidence, and overall effectiveness of an augmented security program. Sourcing of an enhanced full-time operations center to conduct daily briefings, to command and control augmented security programs, and other security-related activities is essential. This will facilitate the greater posture of the armed personnel to make sure appropriate coverage throughout the workday. This facility should include a large layout map of the base that includes base building numbers and room numbers to facilitate security response. Some of this equipment is available within EOCs; making the establishment of full-time operations centers less of a fiscal and resourcing burden. Augmented security requires increased capacity of armory space for additional weapons, additional clearing barrels, and more flexible armory hours for distribution. The UMP CONOP also recommends the use of warning placards at facilities and installations that state, "the location is under armed guard and deadly force is authorized."[215]

<center>Policy</center>

The DoD's current policy on additional arming is clear, but needs to allow more flexibility to the commanders with regards to arming and established baseline standards. This will empower commanders to take the initiative, vice being cautious about additional security and the risks associated. The verbiage in the policy should not only focus on the mission and the threat, but on full-time protection of personnel. The recent rise of propaganda through the Internet, leading to more efficient radicalization, and the less-complex and demonstrated lethal weapons threat provide tactical advantage to violent organizations to attack military assets that cannot be underestimated.

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[215] Headquarters Air Force Security Forces, *Combating Active Shooter: UMP CONOP*, 6.

Per the UMP CONOP, UMs are not first responders and not expected to move to the threat, but act solely as a presence to deter ASEs and provide immediate on-site defense and survivability of personnel. UMs are not LE personnel, but security personnel, and thus not authorized to conduct LE functions.[216] Another important feature of the UMP and UMs is the ability to facilitate the DHS methodology of Run, Hide, and Fight to mitigate the active shooter threat. UMs can facilitate personnel attempting to run or escape by providing cover or increase the chances of successful hiding or barricading by guarding points of entry.[217] UMs are also required to operate only government issued pistols, and open carry as a form of overt deterrence, to help prevent fratricide of other responders, and to provide for the use of vest and mobile radios. UMs can carry with weapons off safe, meaning weapons in the fire position, to provide greater ease of employment. Policy also allows the use of privately owned vehicles when transporting government weapons during official duties.[218] Moreover, leaders should strongly consider concealed carry use in all security decisions for LE, MPs, or augmented security personnel with advanced training.

<div align="center">Risks</div>

The arming of additional personnel on DoD installations bears a greater risk of negligent discharges or deliberate blue on blue attacks that could end in unwarranted deaths of personnel. In the event of an ASE, the greater presence of armed individuals

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[216] Headquarters Air Force Security Forces, *Combating Active Shooter: UMP CONOP*, 4.

[217] Ibid., 5.

[218] Ibid., 6.

will increase the potential contact of individuals with weapons attempting to disable the threat. The greater number of weapons firing in any direction to disable the threat will also increase the potential for fratricide and greater casualties. The major mitigation for augmented security is enhanced training, security screens, and regular discussion of standard operating procedures; and leadership oversight.

Conclusion

Despite increased security measures and new response protocols, the United States continues to suffer from active shooting incidents, and the 2015 shooting in Chattanooga demonstrate that attacks on DoD installations are different only in the number of occurrence. This research indicates that the only effective means of reducing the effects of an active shooter is to increase the capability of victim-initiated responses accompanied by swift and coordinated first responder actions. Again, the DoD force, given their mission profile, risk of ASEs, population density, and exposure to insider threats should consider arming additional troops a full-time responsibility; and not just a method reserved for combat. Military members deserve access to more aggressive victim or target initiated responses to these threats, and an increased and well placed armed response is a viable solution.

Recommend Areas for Further Research

Resourcing

The arming of additional personnel will have a wide range of second and third order affects across the force management domain that will require focused research efforts. What will be the cost of training facilities, extra pistols, and ammunition? Is there

a better alternative to the M9 pistol that would be more beneficial in this scenario, with less cost and a simpler procurement plan? With each of the services conducting their own specific military police and civilian LE training, the DoD may have to consider a separate training block and standards for additionally armed personnel.

Recruiting Personnel

This research did not focus on the additional challenges posed to arming personnel located on DoD installations in close contact with civilians. Installations such as recruiting centers could pose additional challenges with regards to the Posse Comitatus Act, public perception, and the ability to effectively recruit. Recruiting centers are often located in areas of heavy civilian traffic to include shopping malls, shopping centers, college campuses, etc. Armed recruiters could have an impact on the perception of U.S. Forces, whether positive or negative. This aspect of arming requires additional research to include implications of the Posse Comitatus Act.

Foiled Attacks

ASEs that failed prior to execution, or foiled attacks, could provide additional information to support development of new techniques or modification of existing techniques to deter or mitigate ASEs. The FBI or other National agency may produce this analysis in the future, but will not be focused particularly on events against DoD installations and personnel. Analysis of foiled attacks is inherently difficult since court proceedings can take years to determine resolution and the deaths of potential perpetrators leave questions unanswered. Regardless, the study of foiled ASEs against

DoD personnel could improve current thought, deterrence measures, and tactics towards threat mitigation.

Augmented Security Number and Structure

Additional research and DoD planning should be conducted to determine the adequate number and implementation guidelines for augmented security. One option would be to increase the number of MPs or allow regular service men and women temporary duty to participate in a Crisis Response Unit like those already established at Fort Hood. These units could provide regular full-time workplace security and active shooter deterrence, and reinforce FP across the base during emergencies. At Fort Hood, the crisis response unit cordoned the crime scene, augmented access control points, and effectively executed enhanced FP condition measures at 22 sites on Fort Hood.[219]

Other methods of implementation to consider would be augmented security numbers based on percentage of the population or amount of protection at critical infrastructure. Further considerations would be the balance of concealed carry vs. open carry, the responsibility of individual units on the base, percentage of augmented security to overall population like 5 percent or 1:30, and the appropriate mix of civilian volunteers.

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[219] Secretary of the Army, *Fort Hood Army Internal Review Team: Final Report*, 13.

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